

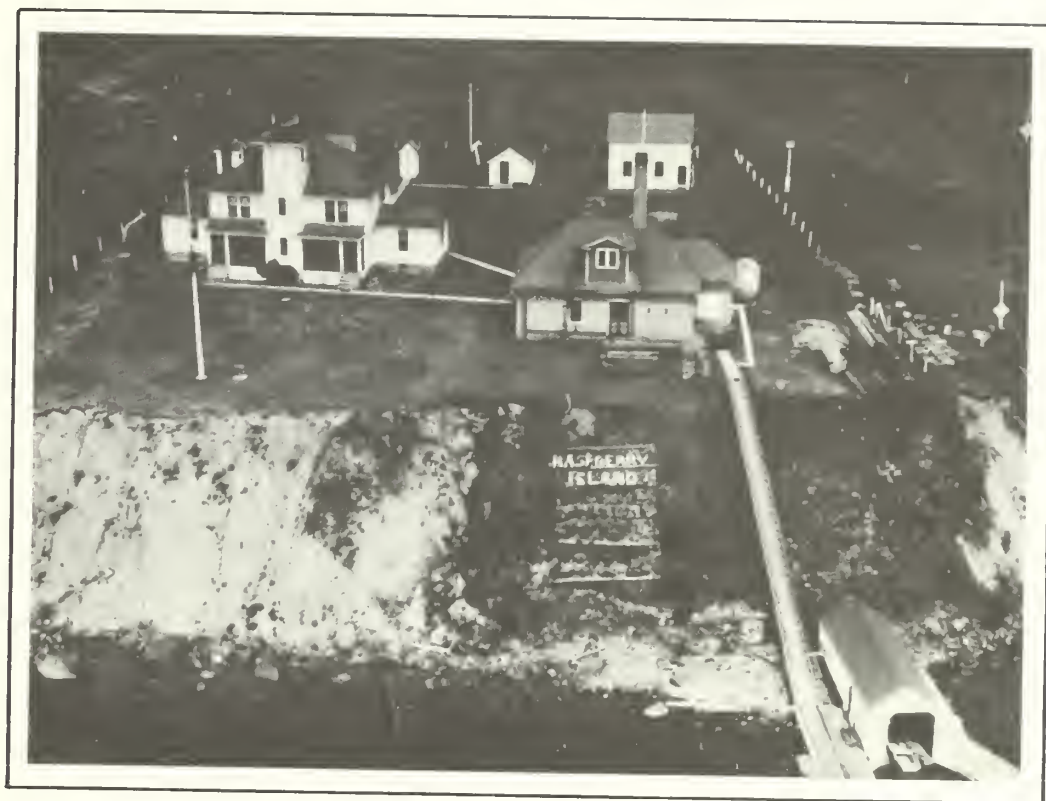
I 29.88/2-2:R 18
Historic Furnishings Report...



FURNISHINGS
CENTER

NOV 1 1990

CLEMSON
LIBRARY



Historic Furnishings Report

RASPBERRY ISLAND LIGHT STATION

APOSTLE ISLANDS
National Lakeshore / Wisconsin



Approved:

Regional Director, Midwest Region
January 1990


Historic Furnishings Report

Raspberry Island Light Station

Apostle Islands National Lakeshore
Bayfield, Wisconsin

by
David H. Wallace
Staff Curator

U.S. Department of the Interior
National Park Service
Harpers Ferry Center
Harpers Ferry, WV
1989



Digitized by the Internet Archive
in 2012 with funding from
LYRASIS Members and Sloan Foundation

<http://archive.org/details/historicfurnishi00rasp>

Contents

LIST OF ILLUSTRATIONS	vii
ACKNOWLEDGMENTS	xi
ADMINISTRATIVE DATA	1
Prior Planning Documents	1
HISTORICAL DATA	3
ANALYSIS OF HISTORIC OCCUPANCY	3
History of the Buildings	3
The Keepers of Raspberry Island Light Station, 1863-1947	6
The Keepers' Duties and Responsibilities	7
The Keepers' Families	16
Keeper Benton and His Family	21
Keeper Benton	22
The Two Mrs. Bentons	29
Harold Benton	32
Other Occupants of Raspberry Island, 1914-1924	33
Assistant Keepers and their Families	33
Visitors	35
EVIDENCE OF ROOM USE AND FURNISHINGS	37
Keeper's Quarters	37
Front Porch	40
Vestibule	40
Living Room	41

Dining Room	45
Pantry	48
Kitchen	49
Stairs and Upstairs Hall	55
Front Bedroom	56
Middle Bedroom	58
Back Bedroom	60
Other Upstairs Furnishings	61
Tower	61
Service Room	63
Lantern	66
Fog Signal Building	69

FURNISHING PLAN	83
----------------------------------	-----------

INTERPRETIVE OBJECTIVES	83
-----------------------------------	----

OPERATING PLAN	84
--------------------------	----

RECOMMENDED FURNISHINGS	89
-----------------------------------	----

Kitchen	89
Pantry	94
Dining Room	95
Living Room	99
Stairs and Upstairs Hall	102
Back Bedroom	103
Middle Bedroom	104
Front Bedroom	106
Tower	109
Service Room	110
Lantern	110
Fog Signal Building	111

WORKING DRAWINGS	116
----------------------------	-----

BIBLIOGRAPHY	125
 APPENDIXES	 201
APPENDIX A—Benton Family Letters	202
APPENDIX B—Obituaries of Anna and Lee Benton	221
APPENDIX C—List of artifacts in Benton Collection, Apostle Islands National Lakeshore.	223
APPENDIX D—Keeper's Annual Property Return and Receipt, Split Rock Light Station, Minnesota, 1925	228
APPENDIX E—Furnishings in the Keeper's Quarters, Michigan Island, ca. 1905-1929	241
APPENDIX F—Furnishings in the Keepers' Quarters on Outer, Devil's and Long Islands, 1920s-1940s	246
APPENDIX G—Light Maintenance in the 1930s	251
APPENDIX H—Maintenance of the Raspberry Island Tower and Light, 1904-1939	253
APPENDIX I—"Brasswork, or The Lighthouse Keeper's Lament"	257
APPENDIX J—Installation and Maintenance of the Raspberry Island Fog Signal Building and Equip- ment, 1903-1952	259
APPENDIX K—Care of Lights and Management of Steam Engines and Builders	265
APPENDIX L—Drawings and Specifications for Steam Fog Signals	274

List of Illustrations

1. Raspberry Island Light Station from the lake, 1920134
2. Raspberry Island Light Station, ca. 1906-45, plot plan136
3. Raspberry Island, station building and fog signal building, 1922138
4. Raspberry Island Lighthouse from the east, Aug. 14, 1922138
5. Lee Benton, 1st assistant, Devils Island Light Station, Minnesota, washing clothes outside his quarters, 1912-14140
6. Family and friends of keeper McLean in front of the Raspberry Island fog signal building, 1912-1914140
7. Anna Benton giving her visiting friend Mabel Eddy a wheelbarrow ride in front of the keeper's quarters, Raspberry Island, 1915 or 1916142
8. Two unidentified visitors in front of the assistants' quarters, ca. 1920142
9. Visitors Bessie Grimm (left) and Evelyn Lutz (right) on the keeper's front porch, Raspberry Island, July 27, 1922144
10. Keeper Lee E. Benton, Raspberry Island Light Station, July 26, 1922144
11. Keeper Benton and Mabel Eddy on the front walk, Raspberry Island, 1915 or 1916146
12. First Assistant Lee Benton in the fog signal building at Split Rock Light Station, Minnesota, 1911146
13. Ship model made by Lee Benton for his second wife, 1923/24148

14.	Bessie Grimm, Evelyn Lutz, and Lee Benton (?) play- acting on the lawn in front of the keeper's quarters, Raspberry Island, August 17, 1922	148
15.	Anna Klein Benton, outside her winter home in Bayfield, 1914-19	150
16.	Mrs. Anna Benton holding baby Harold, born April 15, 1907	152
17.	Lee and Harold Benton on the keeper's front porch, Raspberry Island, 1922	154
18.	Bess Grimm and Evelyn Lutz in the lantern of the ligh- thouse, Raspberry Island, July/August 1922	154
19.	Harold Benton, ca. 1922, with his marksmanship trophy	156
20-23.	Drawings for "remodeling tower and dwelling," Raspberry Island Light Station, October 30, 1905	158
24.	Living room, Raspberry Island, about 1945	166
25.	Kitchen, Raspberry Island, about 1945	166
26.	Evidence of stair treads on keeper's stairway and runner on hall floor, Raspberry Island, June 1989	168
27.	Evidence of former floor covering in middle bedroom, keeper's quarters, Raspberry Island, June 1989	168
28.	Fifth-order Fresnel lens with flash panels, used at Raspberry Island Light Station 1863-1947	170
29.	The lantern, Raspberry Island Light Station, with cur- tains closed, about 1920	170
30.	Plan from "Drawing 10911, Raspberry Island Light Sta- tion, Wis./Fog Signal Building Repairs," October 15, 1925	172
31.	Longitudinal Section, from "Drawing 10911, Raspber- ry Island Light Station, Wis./Fog Signal Building Repairs," October 15, 1925	174

32.	One of the boilers for the Raspberry Island fog signal building, June 1903 . . . . .	.176
33.	Fog signal cistern, pump, and water line, ca. 1922 . . . . .	.176
34-37.	Drawing 11641S, "Raspberry Island Light Station Wis./Air Diaphone Fog Signal Installation," approved February 18, 1932, and revised to show radio installation (March 27, 1939), electrification (April 1941), addition of fuel tank and two Kohler generators (1946), and introduction of CO2. Fog Bell equipment (August 8, 1947) . . . . .	.178
38.	Lighthouse Service crew installing air diaphone fog signal equipment, Raspberry Island, July 28, 1932 . . . . .	.186
39.	Fog signal building, 1945, showing the steel plates installed in 1925 to straighten the south wall, and the dormer added in 1932 to house the air diaphone horns . . . . .	.186
40.	Switchboard for electrical system installed in fog signal building, Raspberry Island, 1941 . . . . .	.188
41.	East end of fog signal building, Raspberry Island, showing original chimney stack, ladder to diaphone platform (1932), battery bank (left, 1941), and electric lights (1941) . . . . .	.188
42.	Pre-1932 cupboard and work bench, east end of fog signal building, Raspberry Island, June 1989 . . . . .	.190
43.	"Kohler of Kohler" generator, ca. 1946, east end of fog signal building, Raspberry Island, June 1989 . . . . .	.190
44.	One of three chairs used by the Bentons on Raspberry Island . . . . .	.192
45.	One of three chairs used by the Bentons on Raspberry Island . . . . .	.192
46.	Berry set (bowl and six dishes) used on Raspberry Island by the Bentons . . . . .	.194
47.	Aladdin lamp used on Raspberry Island by the Bentons . . . . .	.194

48.	Edison Amberola VI phonograph, ca. 1913/14, owned by Keeper Benton of Raspberry Island	196
49.	Oriental-pattern rug possibly used on Raspberry Island by the Bentons	196
50.	Mirror used on Raspberry Island by the Bentons	198
51.	Washbowl used on Raspberry Island by the Bentons	198

ACKNOWLEDGMENTS

For their enthusiastic support and unstinting help in the gathering and interpretation of documentary, pictorial, and physical evidence relating to the Raspberry Island complex, I am much indebted to Superintendent Alford J. Banta and his staff at Apostle Islands National Lakeshore. Chief of Interpretation Diane Chalfant, Historian David Snyder, and Museum Technician Laura Hiland have been particularly helpful in response to my many questions and requests for photographs. My timing was not the best, since my calls for help coincided with preparations for their celebration of the Lighthouse Service's bicentennial, but they cheerfully took on my case along with their other added duties.

My search for and use of official records of the Lighthouse Service relating to Raspberry Island Light Station were facilitated by Archivist William Sherman and other National Archives staff in Washington, D.C., and in Suitland, Maryland. Ms. Kelly Green, of the National Archives, Great Lakes Region, Chicago, went out of her way to help track down Coast Guard records formerly in the Federal Records Center at Chicago.

Mr. Conrad Beyer, of Optenberg, Inc., Sheboygan, Wisconsin, has been especially helpful in supplying information on the steam boilers and machinery his company manufactured for Raspberry Island Light Station in 1902-03. James Woodward, Environmental Specialist, 9th District, U.S. Coast Guard, Cleveland, Ohio; Michael Van Hoey, of Lighthouse Properties, Ltd.; and William Hurd, Park Interpreter, Sleeping Bear Dunes National Lakeshore, Michigan, also provided helpful leads in the search for information on steam fog signal equipment.

Lee Radzak, Site Manager, Split Rock Lighthouse, Minnesota, and his assistant, Deborah Rustad, generously made available to me copies of several documents relevant to this study, notably the annual property returns for Split Rock in 1915 and 1925 and the personal diary of 1st Assistant Harry W. Thompson, 1913-19.

For their assistance in preparation of this report and for travel arrangements and other backup services, I am indebted to Cheryl Hill, Norma Smallwood, and Trena Fletcher, Division of Historic Furnishings, Harpers Ferry Center.

ADMINISTRATIVE DATA

Prior Planning Documents

Documents affecting the use and management of the Raspberry Island Light Station are:

"Master Plan, Apostle Islands National Lakeshore," 1971.

"Interpretive Prospectus, Apostle Islands National Lakeshore, Wisconsin," Harpers Ferry, WV: Harpers Ferry Center, 1979.

"Historic Furnishings Survey, Great Lakes Lighthouses," by Katherine B. Menz, et al, Harpers Ferry, WV: Harpers Ferry Center, 1980.

Statement for Management, Apostle Islands National Lakeshore, March 1982.

"Special History Study: Light Stations of the Apostle Islands National Lakeshore," prepared under contract by Rathbun Associates for the National Park Service, Midwest Regional Office, February 1988.

HISTORICAL DATA

ANALYSIS OF HISTORIC OCCUPANCY

History of the Buildings

Raspberry Island is one of the smallest of the 22 islands that make up the Apostle Islands, an archipelago in Lake Superior off the Bayfield Peninsula of northern Wisconsin. Along with five other islands in the group (Long, Michigan, Outer, Devils, and Sand), Raspberry became the site of a light-house in the mid-19th century, when burgeoning trade in iron, timber, and other products made it necessary to install navigational aids along the shores of Lake Superior. Authorized in 1859 and established in 1863, Raspberry Island Light Station primarily served vessels plying between the Chequamegon Bay ports of Ashland and Bayfield, Wisconsin, and the western end of Lake Superior (Duluth/Superior). Although never the scene of a major shipwreck, Raspberry Island's harbor-size, 5th-order light and its fog signal (from 1903) helped many a commercial vessel along the treacherous shoreline from 1863 until the Coast Guard closed the station in 1947. The island still has an automatic light on a modern steel standard, but the old station's 9 buildings have stood empty or housed corporate vacationers and National Park Service employees during the past 40 years. Remarkably, the complex has survived almost intact and looks, from the outside at least, much as it did in the 1920s-1940s (figs. 1-2) when it was known to some as "the showplace of the Great Lakes."¹

Of the two major structures at the station, the older by three years is the Fog Signal Building (LCS No. HS-08-102B), almost invariably referred to in contemporary records as the "fog signal" (fig. 3). This unpainted brick structure was put up in June-August 1903 and went into operation in September, when its dual steam whistles first sounded across the foggy channel separat-

1 Mrs. Thyra Seseman, wife of the last keeper of Raspberry Island Light Station, in a letter to Mrs. Marjorie F. Benton, July 3, 1982 (copy, Apostle Islands National Lakeshore (APIS) files).

ing Raspberry Island from the main shore. A small wing at the east end of the fog signal building houses the winch that hoisted supplies up the tramway from the dock. For several years, there was also a “hard coal house” up against the east end of the fog signal; this was removed in 1929 and a coal bin put in the woodshed.²

The other major structure, the main station building (LCS No. HS-08-102A), comprising the light tower and the keeper’s and assistant keepers’ quarters, was erected in 1906 (figs. 3-4). Incorporated in it were parts of the original 1862 tower and keeper’s quarters. Despite some interior upgrading in the 1940s and some structural stabilization and rehabilitation by the National Park Service in the mid-1970s, this structure has changed little in appearance since 1906.³

Behind the fog signal is a smaller brick building (LCS No. HS-08-102H), originally known as the oil house, later as the magazine (fig. 2); in it were stored the barrels and cans of kerosene that fueled the light until the 1940s.⁴ Concrete cribs beside the oil house, now empty, may have held the fuel tanks for the diesel-powered engines installed in the fog signal building in 1932/33, when the fog signal was converted from steam to compressed air.

Several frame outbuildings are lined up behind the main station building (fig. 2). From west to east (left to right, as viewed from the front of the sta-

2 Rathbun Associates, “Special History Study: Light Stations of the Apostle Islands National Lakeshore,” prepared for the National Park Service, February 1988, p. 69. Cited hereafter as Rathbun, “Light Stations.” Work on the fog signal house began June 10 and was essentially completed by August 19, 1903; Keeper Benton built a “hard coal house” between September 13 and 19, 1916, and took down the “old coal house” on November 20, 1916; on August 13, 1929, Keeper Wilks made a new coal bin in the woodshed and dismantled the “old coal house [Benton’s] at east end of signal” (Raspberry Island Light Station, journals, Record Group 26, National Archives, Suitland, MD, cited hereafter as Raspberry Island, station journal).

3 Rathbun, “Light Stations,” p. 70. Keeper Charles Hendrickson recorded in the Raspberry Island station journal that the construction crew and their materials arrived on May 11, 1906, that the light was reactivated in its new tower on July 4, and that the keepers “moved in to the new dwelling” on October 14, 1906.

4 The annual report of the Light House Board for 1902 recorded the building of “a brick oil house” at Raspberry Island Light Station “with a capacity for storing 360 gallons of oil.” On August 8, 1929, Keeper Wilks noted in the journal that they had built a foundation in the oil house for the new oil tank delivered by the lighthouse tender. The writer has found no mention in the journals (through 1939) of the installation of the outside tanks.

tion) these are the assistant keepers' outhouse, the woodshed, the keeper's outhouse, the 2nd assistant's "shack," and the "warehouse" or "barn." Behind the barn stands the "wash house" or "laundry" with attached cold-water shower bath. The barn, two outhouses, woodshed (authorized in 1904), and 2nd assistant's shack are all visible in a 1906 postcard photograph (APIS collection, not illustrated). The wash house, first mentioned in 1929, may date from after 1906; the shower ("bath room") was added in 1933.⁵

Several boat houses have stood by the dock over the years; the date of the present one is not known, although it probably pre-dates the closing of the station in 1947 (figs. 1-2). Like the dock itself, the boat house was more than once destroyed or severely damaged by storms or moving ice.⁶ The tramway was built in 1902 to facilitate hauling the materials for the fog signal building to the top of the bluff.

Other structures mentioned in the station journal between 1906 and 1939 include a chicken coop (June 10, 1913), a "new swing" (July 31, 1919; see fig. 4), "posts for a new clothes line" (May 6, 1920), "shed for horse" or "stable for horse" (rebuilt, August 26-28, 1927), "bird houses" (put up, May 6, 1931), and "smoke house" (built, July 26, 1938). The "shop" mentioned on September 5, 1927, also called the upstairs "carpenter's shop" (June 6, 1931) and "work shop" (May 4, 1932), was probably located in the barn/warehouse erected in 1906.⁷

5 September 19, 1906: painted "watercloset"; October 8, 1906: "Moved the kitchen outfit from the old shed to the new barn"; June 18, 1907: "piled stove wood into the woodshed"; September 2, 1913: "set a cookstove upstairs in the ware house"; May 11, 1915: "out-houses"; May 13, 1916: "painting ware house, wood shed, and 2nd Asst. shack"; April 22, 1929: painted roofs of "wood shed, wash house and toilets"; September 26, 1932: put stove in "laundry"; August 22, 1933: "working on bath room in wash laundry." All citations from Raspberry Island, station journal.

6 The boat house was enlarged during Lee Benton's time to accommodate the new station motorboat. (Raspberry Island, station journal, August 18-September 11, 1916). Need for the tramway was explained by 11th District Engineer Beach to the Light House Board, March 14, 1902 (Light House Board Correspondence, file 3655, RG 26, NA).

7 Raspberry Island, station journal, dates cited in text.

The following sections of this report concentrate on the post-1906 years and particularly on the period from 1914 to 1924, when Lee E. Benton and his family lived in the keeper's quarters.

After the Coast Guard automated the light and fog signal and shut down the station in 1947, the buildings stood empty for a short time before being leased to several corporations for use by their employees for retreats, vacations, and other recreational purposes. Since the station became part of Apostle Islands National Lakeshore, the buildings have been unoccupied except for summer use as National Park Service employee quarters.⁸

The Keepers of Raspberry Island Light Station, 1863-1947

From the time its light was activated in 1863 until its full automation in 1947 Raspberry Island Light Station was superintended by 16 principal keepers. Initially the keeper had one assistant, but with the installation of the fog signal in 1903, the station's workload justified the addition of a second assistant. From 1905 on, therefore, Raspberry Island's staff consisted of a keeper, 1st assistant, and 2nd assistant.⁹

When Lee Benton became keeper of Raspberry Island station in 1914 his salary was \$600 a year and his assistants' \$350-400. Rates were changed in 1918, for the first time in more than 50 years. In 1923 Benton earned \$1140 (a base salary of \$900 plus a bonus of \$240 because the light was on an island), while his assistants earned a total of \$660 and \$600, respectively. Salary supplements included free fuel and transportation and, after 1918, pension and medical benefits.¹⁰

During Lee Benton's 11 years as principal keeper of Raspberry Island Light Station (June 19, 1914, to November 12, 1924), assistants came and went fairly often. Here is the record, as drawn from the station journals:

8 Rathbun, "Light Stations," p. 80. Mel and Joyce Erickson, caretakers on Raspberry Island for Ellerbe Architects Corporation of Minneapolis from 1963 to 1975, have described conditions during these years in an interview with Kate Lidfors, Apostle Islands National Lakeshore, March 2, 1982 (APIS files).

9 Rathbun, "Light Stations," pp. 50-51, 62-63, 69-72, 80, 106-107. The Rathbun report, p. 124, indicates no 2nd assistant after 1944, but Mrs. Thyra Seseman (letter to Marjorie Benton, July 3, 1982) stated that her husband, the last keeper (1945-47), had two assistants, Ted Schelvan and Eino Hill.

10 Rathbun, "Light Stations," pp. 32-33; George R. Putnam, *Lighthouses and Lightships of the United States* (Boston and New York: Houghton Mifflin & Co., new and revised edition, 1933), p. 238; "List of Field Service Positions September 30, 1923," U.S. Light House Service, RG 26, E 113, file 5, National Archives, Washington, DC.

1914	June 19	Lee Benton assumes post of keeper; Ole Kristiansen stays on as 1st assistant; Alex McLean, former keeper, stays on as 2nd assistant.
1915		no change: Kristiansen and McLean
1916	April 30	1st Assistant Kristiansen transferred to Sand Island, replaced by Charles Van Alstine.
	May 9	2nd Assistant McLean transferred to Huron Island
	June 17	2nd Assistant Almond Cummings reports
	June 19	2nd Assistant Cummings resigns "as there are no quarters for his family"
	July 26	2nd Assistant Edward Hall reports
1917	May 6	2nd Assistant Charles H. Craig reports
	June 27	1st Assistant Oscar J. Lukes reports
1918	May 6	1st Assistant Charles Craig and 2nd Asst. Fred R. Corran report
	July 1	2nd Assistant Corran resigns
	September 6	2nd Assistant William Smith reports
1919	May 9	2nd Assistant Smith resigns
	May 14	2nd Asst. Archie H. Harmony reports
	June 4	1st Assistant John G. Ball reports
1920		no change: Ball and Harmony
1921	April 19	1st Assistant Ball transferred to Devils Island; 2nd Assistant Harmony promoted to 1st assistant; James A. Belaungea reports as 2nd assistant
1922	April 25	2nd Assistant Belaungea transferred to Michigan Island
	May 17	2nd Assistant John T. Murphy reports
	August 5	2nd Assistant Murphy resigns
	September 28	2nd Assistant Herbert ("Toots") Winfield reports
1923	May 21	1st Assistant Harmony resigns; 2nd Assistant Winfield promoted to 1st assistant
	June 23	2nd Assistant Thomas Hessing reports
1924		no change; Winfield and Hessing carry on alone after Keeper Benton's death in November. [Hessing stayed on as 2nd through 1928 and Winfield as 1st assistant until 1930.]

The Keepers' Duties and Responsibilities

The principal keeper's paramount responsibility was to operate the light and the fog signal according to the standards and procedures detailed in the *Instructions to Light-Keepers and Masters of Light-House Vessels*, issued at intervals by the Light-House Board and its successor, the Lighthouse Bureau of the Department of Commerce and Labor. Only slightly less important, in the eyes of his superiors, was his responsibility for maintaining the public property in his charge. He also was required to keep a daily journal and to

submit various forms, including monthly reports to the district superintendent, annual property returns, and annual requisitions of supplies.

Although the keeper had ultimate responsibility for the operation of his station, he and his assistants all did the same work. Whenever the keeper was absent, the senior assistant assumed his responsibilities. The journals make it clear that keepers like Benton shared fully in the work of the station.

The keepers' work was thus neatly summarized in a 1926 study of the Light House Service:

The keepers operate, clean, and repair the lights and fog signal apparatus. They maintain and repair the buildings on the station reservation, and assist working parties in construction and repair work.¹¹

What this meant in real-life terms is illustrated in the reminiscences of men who worked at lighthouses on the Great Lakes and elsewhere in the United States.¹² One needs only to read the journals of Raspberry Island station for several years in the early 20th century to gain an appreciation for the patient toil, mainly in apparatus and building maintenance, that filled the days of Benton and his assistants.

To keep a light going did not call for a specialist in any one field but for a tinkerer who could mend plumbing and machinery and do carpentry, painting, masonry, and plastering work. A man had to know how to handle a skiff with a pair of oars in bad weather, and how to raise food for the table, as well as ornamental flowers.¹³

The following excerpts from Keeper Benton's 1915 journal cover many, but far from all, the varied tasks the three men performed in the daytime:

April 1915

21 Arrived at the station at 10:45 a.m. by station boat. Found everything in good condition. Put new charriot wheels under the lense [sic], burning grass this p.m.

22 Working in signal, fired up No. 1 boiler and tried out engine syphoning water, blew out flue in No. 1 boiler, had to haul fire.

11 George Weiss, *The Lighthouse Service: its History, Activities and Organization*. Institute for Government Research. Service Monographs of the United States Government No. 40 (Baltimore: The Johns Hopkins Press, 1926, reprinted 1974), p. 63.

12 For instance, *Living at a Lighthouse: Oral Histories from the Great Lakes*, edited by LuAnne Gaykowski Kozma (Detroit: Great Lakes Lighthouse Keepers Association, c. 1987); Gordon P. Manning, *Life in the Colchester Reef Lighthouse* (Shelburne, VT: The Shelburne Museum, c. 1958); and many oral history interviews in the Apostle Islands National Lakeshore history files.

13 Hans Christian Adamson, *Keepers of the Lights* (New York: Greenberg, c. 1955) p. 20.

- 23 Testing No. 2 boiler & engine. Keeper left for Long Island for flue plugs for No. 1 boiler.
- 26 Fitting out hoisting engine, painting screens and working on motor boat.
- 27 1st asst. painting in dwelling.
- 28 Painting the roofs and cleaning out signal.
- 29 Finished painting the roofs.

May 1915

- 3 Washing walls in tower and working in signal.
- 4 Cleaning in signal & mowing the lawn.
- 5 Painting on the dwelling this forenoon.
- 8 General cleaning about station.
- 10 Painting on dwelling.
- 11 Painting on dwelling & out houses.
- 12 Painting boat house, trimmings on fog signal and other work.
- 13 Painting in signal and railing to dock.
- 14 Assts. polishing lense [sic].
- 17 Changing exhaust pipe of No. 2 engine, painting walls in signal, mowing the lawn & cleaning windows & putting on screens in dwelling.
- 18 Painting outside and inside of lantern, also verandah floors.
- 19 Polishing brass in tower, painting in signal.
- 20 Painting the [boiler] jackets in signal, cleaning up the hoisting engine.
- 22 Fixing leaks in signal roof, cleaning up the warehouse, cleaning in tower and dwelling.
- 24 Painting motor boat, fog signal engines, hoisting engine & ranges.
- 25 Fixing drain pipe from water colum[n] on No. 1 boiler, working in garden.
- 26 Making garden.
- 28 Cleaning bright-work [in] tower and signal, also hoisting engine.
- 29 Mowing the lawn and working in boat house.
- 31 Working on slide for motor boat, painting the small skiff, cleaning out oil house, and scraping and varnishing outside doors on dwelling.

June 1915

- 1 Scraping tower door, cleaning tower steps for varnishing, making cover for grindstone.
- 2 Whitewashed fence posts and oil house.
- 3 Varnished tower stairs.
- 9 1st Asst. varnishing floors.
- 14 Polishing brass and cleaning windows in signal, varnishing floors in assts dwelling.
- 21 Polishing brass in signal and clearing grass from edge of sidewalk.
- 29 Brushing out road to the sand point.
- 30 Getting stove wood from sand point with boats.

July 1915

- 13 Cleaning brass in signal.
- 17 Cleaning brass in signal & tower.
- 20 Keeper left for town 12 noon for material for storm doors & ladders.
- 22 Cutting the lawn grass.
- 24 Cutting grass.
- 28 Cleaning cistern in dwelling and filling same.
- 29 Cleaning in signal & cutting lawn grass.
- 30 Finished the lawn.

August 1915

- 2 Cutting stove wood for dwellings.
- 3 Cutting stove wood.
- 7 Cleaning in tower & helping machinist [work on boilers].
- 9 Helping machinist in signal.
- 10 Put two new flues in No. 1 boiler.
- 11 Working with machinist testing safety valves on both boilers, blew off No. 1 boiler and No. 2 boiler, grinding safety valves, worked till 9 p.m.
- 13 Mr. Strachan finished with his work and the keeper took him over to Devils Island...cleaning up in signal.
- 14 General cleaning in signal & tower, painting boilers & pipes.
- 17 Splitting stove wood.
- 27 Working in the signal, cleaning floor and jackets, making storm doors for dwelling.
- 30 Making coal bunker in ware house.
- 31 Painting roof on 2nd Asst dwelling, also painted pipe box.

September 1915

- 1 Wheeling stove wood, cleaning up grounds, painting storm doors.
- 4 Cleaning in tower & signal...washing lantern in tower, also service room.
- 15 Putting hard coal in ware house.
- 21-23 Cutting stove wood.
- 24 Making new cover for fog signal cistern.
- 27 1. and 2. asst. dug potatoes.

October 1915

- 2 Painted cistern cover.
- 5 Keeper digging potatoes.
- 15 Putting up storm doors.
- 16 Putting up storm windows.

November 1915

- 24 Cleaned out furnace in signal and washed the floor...making new ladder for signal roof.
- 25 Fixing roof around chimney of 1st Asst. dwelling, it was leaking bad.
- 26 Keeper painting in dwelling.

- 29 Had to dig up the sewer pipes from signal; they were blocked up with clay.

December 1915

- 1 Getting motor boat ready for the trip to town at the close.
3 Laid up No. 2 boiler, took safety valve off and boxed it, to be shipped to Detroit for repairs.
5 Laid up fog signal for the season.
6 Closed station for the season today.

The 1915 season was somewhat untypical, because that year painting was a relatively minor part of the spring clean-up at the station. More typical was the year 1922, when Keeper Benton recorded the following painting chores:

May

- 5 Keeper removing varnish of [sic] his kitchen floor.
7 Oiling the keeper's kitchen floor.
8 Painting the spar [buoy] and swing.
9 Working in dwellings varnishing.
11 Painting row boat, also cabin on motor boat.
15-17 Painting the dwelling.
20 Painting out side.
22 Finished painting dwellings.
23 Finished painting white, painted flag pole again.
24 Painting screens.
25 Painting on signal, painting the dwelling screens.

June

- 2 Painting hand rails, porch floors, shutters on signal, cleaning and painting hoister and oil room.
6 Painting motor boat.
18 Painting in signal.
23 Varnished tower stairs.

"There always seemed to be a paintbrush in his hand," the child of another Great Lakes lighthouse keeper recalled: "the government put great stock in painting. They painted and they repainted and they painted, until paint usually built up so it had so many coats there were no sharp edges at all anywhere."¹⁴

¹⁴ Kozma, ed., *Living at a Lighthouse*, p. 29, referring to George Sheridan, keeper of Saugatuck Light, Michigan, 1905-15.

Care of the light itself, the lens and lamp and revolving apparatus, does not figure as largely as one would expect in the station journals' record of daily activities. Perhaps this was because the procedures involved were spelled out in detail in the *Instructions to Light-Keepers* and were performed automatically every morning after extinguishing the lamp. The section of these instructions relating to "care of lights and their appurtenances" is reproduced in Appendix K of this report.

The keepers took turns standing watch throughout the night to insure that the light was operating properly. Raspberry Light had a 5th-order Fresnel lens that revolved at a fixed speed to produce a flash of concentrated light at regular intervals, originally every 90 seconds, reduced to every 60 seconds in 1894. The light source in Lee Benton's time and until 1931 was a Hains 5th-order 1 1/4" wick kerosene lamp. It was up to the keeper on watch to note and correct any dimming of the light due to accumulation of carbon on the chimney or ice on the lantern glass and to wind up the weight that operated the clockwork revolving mechanism. The clock weight had to be wound up twice, once in the morning as part of the preparation for the next night and again about midnight.

On occasion things went wrong and were duly recorded in the station log. In 1910, for instance, the 2nd assistant on watch found the main door to the tower locked, apparently forgot that there were two other doors in the keeper's quarters, and failed to alert the keeper, who awoke in the morning to find that the clock had run down and the lens stopped revolving at 3:00 a.m. On another occasion, in December 1911, Keeper Alex McLean "got up at 6:20 a.m., found the revolving apparatus still and the 1st assist. asleep on his kitchen floor on his watch." Such behavior was punishable by dismissal and in both cases the offending assistant was replaced soon after.¹⁵ No similar incidents appear to have marred Lee Benton's or his assistants' records.

The man on watch could spend most of his watch in his quarters, checking periodically to make sure everything was in order. The length of watches varied from station to station; four- or six-hour watches were usual. The practice at Raspberry Island station under Lee Benton is not known, but in 1931, under Keeper Louis Wilks, the keepers stood watch for four hours or for six when one of the three keepers was away.¹⁶

Operating the fog signal, though not a daily chore, could be very time-consuming, hence the need for a 2nd assistant after installation of Raspberry's

15 Raspberry Island, station journal, September 9, 1910, and December 7, 1911; Rathbun, "Light Stations," p. 106-07.

16 Watch book, Raspberry Island Light, 1931-33 (Apostle Islands National Lakeshore museum collection, APIS 55).

fog signal in 1903. Whenever the keeper determined (ideally 30-45 minutes before the need was urgent) that weather conditions (fog, heavy rain, snow, or smoke from mainland forest fires) were going to require use of the fog signal, one of the keepers had to start a fire under the boiler to get up steam to operate the whistle. As long as the apparatus was in operation, a keeper had to be “in the engine house, in charge, and awake,” the 1902 *Instructions* emphasized; “it will not answer to leave the machinery alone for a single moment.” The Raspberry Island fog signal apparently was set up to operate automatically, sounding “blasts of 3 seconds’ duration, separated by silent intervals of 17 seconds.” The timing was initially checked on September 3, 1903, and presumably regularly thereafter, although neither the timing device nor the tests were ever mentioned in the station journals.¹⁷

Although Raspberry’s keepers sometimes got steam up only to have the fog dissipate or the rains stop before the signal needed to sound, there were also times when the whistle sounded for several days and nights at a stretch. Keeper Benton recorded firing up or sounding the signal on at least 26 days during the May-December 1920 season and 32 in the following year. Here are some sample entries from the station journal:

1920

May	30	Heavy rain to nite, started fire in signal.
June	1	Tending signal, rain all day.
	2	Holding bank [fire] in signal
August	8 -9	Tending signal...hazy and fog
October	7	Brisk s. winds, smoke, fires on the main shore, started fire in signal tonight.
	8 -11	[tending signal, smoke]
	13 -15	[tending signal, rain and fog]
November	9	Banked fire in signal [for snow]
	27	[tending signal, snow]

1921

May	22 -24	[tending signal, rain and fog]
June	18 -20	[tending signal, fog]
July	7 -8	[tending signal, rain and fog]
	13 -14	[tending signal, fog]
August	26 -27	[tending signal, rain and fog]
October	16 -17	[tending signal, fog]
November	6	[started fire]

¹⁷ Light-House Board, *Instructions to Light-Keepers and Masters of Light-House Vessels* (Washington: Government Printing Office, 1902), p. 34; “Notice to Mariners, No. 83 of 1903, Washington, August 21, 1903 (Light House Board Correspondence, 1901-10, file 3655, NA); Raspberry Island, Station Journal, Sept. 3, 1903.

11 [started fire]
17 [tending signal, snow]
20 [tending signal, snow]

Steam had to be “got up” also every time the keepers needed to use the winch to haul logs, 50 pound bags of coal, heavy equipment, building materials and other supplies up the tramway from the dock, and when they had to pump water up from the lake to fill the dwelling and fog signal cisterns.¹⁸

The Light-House Board’s *Instructions to Light-Keepers* provided detailed information on the management of fog signal equipment (see Appendix K of this report), but problems with the steam apparatus were not uncommon. Generally the keepers could solve them without outside help. Keeper Benton described a fairly typical crisis in a 1924 letter to his son:

Sunday we worked in the signal, we had 70 lbs of steam on No 1 when a flue blew out and in a minute the signal was full of steam and some water. There was sure some hustling to pull the fire. Then the water glass broke. It seemed like every thing went at once. The next day we had to pump up the boiler again by hand, but after that every thing went fine.¹⁹

Beginning in 1921 Keeper Benton became responsible for maintaining new acetylene gas lights on Sand Island and on the York Island Shoal light buoy. Introduced in this country in 1903, this type of light was fueled by “compressed acetylene dissolved in acetone,...a liquid having the remarkable power of absorbing at atmospheric pressure twenty-four times its own volume of acetylene gas.”²⁰ Although men from the lighthouse tenders placed the heavy cylinders initially, the Raspberry Island keepers had to check them regularly and replace them once during the season. In 1922, for instance, Keeper Benton put the Sand Island acetylene light “in commission” on May 1, returned the next day to correct the “characteristic” or timing of the flash, made 14 trips from May to October to check on the fuel and to clean the light, finally had to replace the two “nearly empty” fuel tanks on October 27, and made one more trip in November to relight the light. During the same season the keepers made eight trips out to the York Island Shoal gas buoy to relight it, usually because of a broken mantle.²¹

In Benton’s day, getting in fire wood was the big fall chore. In July and August the keepers would begin picking up driftwood and logs on the beach

18 Raspberry Island, station journal, September 25, 1923. On November 22, 1924, the assistant keepers “got up steam to lower furniture down to dock on car”; the furniture had belonged to Keeper Benton, who had died ten days earlier.

19 Lee Benton to Harold Benton, Raspberry Island, April 30, 1924 (APIS 2037B).

20 Putnam, *Lighthouses and Lightships*, p. 187.

21 Raspberry Island, station journal, 1922.

at the sand point and either haul it across the island or raft it round to the dock. They also collected wood in the forest behind the station. Much of October they spent sawing and splitting the wood and stacking it in the yard and in the woodshed. In October 1926, two years after Keeper Benton's death, his successor recorded that they had "about 27 cords sawed of stove length." That year the keeper rented a "sawing machine" to save time and effort; up to that time, the wood was apparently sawed by hand. The only specific wood mentioned in the journals was "birch stove wood" (1927); both hardwood and softwood were mentioned in 1905. The wood was sometimes identified as "signal wood" or "stove wood," indicating its use in both the fog signal boilers and in the dwelling heaters and cook stoves, all of which also burned coal.²²

While grounds maintenance, particularly mowing the grass and keeping up the fence around the station, was part of the keepers' official duties, gardening was not. Raspberry Island was blessed with tillable soil of which all the keepers, including Benton, took advantage. Between 1905 and 1925, the station journals reveal that Keeper Hendrickson cultivated strawberries; Keeper McLean grew potatoes, cabbages, onions, lettuce, tomatoes, and strawberries; Keeper Benton planted potatoes and "berry bushes." Evelyn Lutz Durocher, who visited Raspberry Island in 1922, recalled that Mr. Benton had a large vegetable garden with carrots and cucumbers and "the usual type of vegetables," but no fruit trees. Although Benton himself did not own a horse, his friend Frank Marshall, keeper on Devils Island from 1909 to 1921, kept a horse and "made garden" on Raspberry Island in 1917 and 1919 and presumably helped Benton plow his own plot in those and possibly other years.²³ In May 1924, Benton wrote of his gardening efforts to son Harold, away at school:

I have the garden all spaded up and raked but haven't done any planting yet. Bess [his wife] has been working at the flower beds yesterday and to day. We tried to plow that long strip next to the east fence but the horse [owned by one of the assistants] wouldn't or couldn't, but I got a little of it broken up.²⁴

The keepers' wives usually managed the flower beds, for which Raspberry Island, like Michigan Island, was famous, but the men undoubtedly helped out

22 Raspberry Island, station journal, July 21, 1920: "getting beach wood up for dwelling and signal"; August 17 and 21, 1917: "picking up logs off the beach for fire wood" and "hauling logs from the woods for dwelling stove wood";

23 Raspberry Island, station journal, October 16, 1905; October 18, 1911; October 16, 1912; May 13, 24, and 25, 1913; October 14, November 9, 1914; October 5, 1915; May 24, June 5, October 16, 1917; October 28, 1919; September 11, 1922 (hauling fertilizer from Oak Island "for the gardens").

24 Lee Benton to Harold Benton, Raspberry Island, May 27, 1924 (APIS 2038B).

by spading the beds in the spring and by hauling up and whitewashing the rocks that bordered each of the beds.

Aside from weekly day trips into Bayfield, about half an hour away by motor boat in good weather, for provisions and mail, the keepers got off the island for two or three days about once a month. The rest of the time they were on duty seven days a week from the end of April or early May until the lake froze and the station shut down in early December.

Normally, the men came ashore about December 5 on the tender Marigold. The winter of 1919 was an exception. Extremely cold weather and a bad storm delayed Marigold's arrival at Raspberry by several days. Relief came none too soon according to one account, because the keepers' "food supply was almost gone and their coal bunker virtually scraped clean."²⁵ Keeper Benton's own journal entries give little hint of their critical situation:

- | | |
|-------------|---|
| December 2: | It froze over from the main shore today. Started making sleighs this afternoon for I guess we will walk ashore this fall. |
| December 5: | Closing station this morning. Could not get away, lake started to freeze. |
| December 6: | Ice as far as we can see down the channel, also out on the lake but shifting. |
| December 9: | Closing station Marigold. |

The Keepers' Families

Because it was easily accessible and close to the mainland, Raspberry Island was a station where keepers could have their families with them, at least during the summer months. The men generally came out alone to open the station in late April or early May, depending on the lake ice, and were joined by their families in late May or early June, when schools closed. The families would return to town about the first of September, leaving the men to carry on alone, except for weekend visitors, until the station shut down early in December.

The living quarters provided by the Light House Establishment in the early years of this century varied in age and adequacy from station to station. On Raspberry Island, the new keepers' dwelling put up in 1906 provided simple, but by no means primitive, accommodations for two families with children, but not for three families. Almond Cummings, the new 2nd assistant who reported for duty on June 17, 1916, resigned two days later because there

²⁵ Adamson, *Keepers of the Lights*, p. 311.

were “no quarters for his family.”²⁶ For a bachelor or childless couple, there was the “shack” next to the barn, but this was evidently too small for a family. Eventually, possibly while Benton was keeper, the assistants’ half of the dwelling was fitted up as a duplex, with a bachelor apartment upstairs and a slightly larger apartment on the ground floor. The 2nd assistant was still living in a separate “dwelling” in 1920, but by 1926 there was a kitchen on the second floor of the main dwelling; at that time and for a few years after, the bachelor 1st Asst. “Toots” Winfield lived upstairs, and 2nd Asst. Tom Hassing and family lived downstairs.²⁷

Life on Raspberry and the other Apostle Islands stations was not much like the stereotype of the lonely lighthouse keeper. With as many as three families in residence, plus visiting relatives and friends, “the stations were only lonely when school was in session and none of the keepers’ wives remained.”²⁸ Except for the inconvenience of having to make weekly trips to town for provisions and occasionally for medical emergencies, keeping house was not very much different from housekeeping in a Bayfield apartment (fig. 5). There was a premium on good housekeeping, however, which may have weighed rather heavily at times on the keepers’ wives, particularly if, like Lee Benton’s first wife, she was not in good health.

“I know of no other branch of the government [Commissioner of Lighthouses George Putnam was told by one of his superintendents] in which the wife plays such an important part.” Every lighthouse keeper gets a rating...based on a number of things—his own skill, his faithfulness to duty. These are the most important. But there are other items also. For one thing—the spotless order and cleanliness of a lighthouse are traditional in this service. While the government does not expect the keeper’s wife to spend her time cleaning the machinery, polishing the brass pipes—that’s the man’s job—still, the general spic and span-ness of the house—and that’s her province—has a lot to do with her husband’s official rating.²⁹

One lighthouse keeper’s daughter remembered her father getting a demerit because the children, filling in for their sick mother, left a frying pan on the stove. Another recalled:

Each year, about middle of summer, an inspector came....And when that man came, well, he was like probably the “second coming of the Lord” or something...but he’d come there and, well, we’d all hide or whatever. Sweep everything under the rug as quick as you could, if you could....But he’d walk in,

26 Raspberry Island, station journal, June 17 and 19, 1916.

27 Ibid., May 27, 1920; November 26, 1926; July 12, 1929; May 15, 1930.

28 Rathbun, “Light Stations,” p. 40.

29 Putnam, *Sentinel of the Coasts*, pp. 246-47.

he'd go right upstairs, through all the rooms, go into the bedrooms. It is said, now, I do not know whether it is true, [that] the man had gloves on, and he'd go and rub across the chest of drawers or whatever you had up there, to see if there was any dust on it. I'd never see him do that, but some people said he did.³⁰

Inspections and household chores aside, living on Raspberry Island during the summer months had much to recommend it. Vernon Barningham, assistant keeper on Raspberry in the early 1930s and later keeper of Outer Island Light, remembered it as “just like a vacation to them people.”

Well, it was cool and nice and quiet....We had little parties once in a while. We'd go down to the beach [on Outer Island] and have a little cook out....All wives got along swell....They wouldn't go to town half the time.... Better out here, nice and cool here, so hot in town you can't even stand it....It was just like home out here.... They all wish they could go back on the island.³¹

For children, the island summers were a never-to-be-forgotten delight. The children of Walter Daniels (Devils Island) remembered fondly the sandy beach where they went swimming, the picnics, picking blackberries, rowing about. For older boys, summer on the island offered an opportunity to make a little money by fishing and trapping. Walter Daniels, Jr., did “a lot of trapping...[and] a lot of trolling” in the 1920s, and Harold Benton hunted waterfowl (fig. 19) and rabbits and did a lot of fishing. “Some of the kids that we went to school with said, ‘How can you stand it out there? What do you do for a pastime?’ ” says Walter Daniels. “But it was our home and we got used to it and liked it....It was a peaceful life, no tension to it.”³²

Interestingly, the only lightkeepers' wives whose feelings seem to have found their way into print painted a rather darker picture of life on these islands. “The Apostle Island lighthouse stations do something to the wives of the lighthouse keepers,” begins a 1931 newspaper interview with Mrs. Alexander McLean, veteran of tours of duty on Devils Island (1901-09), Raspberry Island (1909-16), and Two Harbors (1917-31).

I hate lighthouses [Mrs. McLean told her interviewer]. They are so lonely. Going from one island to another, out in the Apostles group, isn't much fun, especially when you have to go in a small boat and maybe get caught in a storm. We left Raspberry Island in 1916, and I was glad enough to see the last of it.

30 Loretta Bush Pearson and Joe St. Andre, quoted in Kozma, ed., *Living at a Lighthouse*, pp. 53, 66.

31 Vernon Barningham, interviewed by Marjorie F. Benton, n.d., APIS transcript.

32 Walter Daniels and Isabel Daniels Knapp Cassidy, interview by Marjorie F. Benton, n.d., APIS transcript.

When a woman marries a lighthouse keeper, she gives up everything else in the world. If I had my life to live over again, it would not be in lighthouse stations.

My husband was 35 years in the lighthouse service. Thirty of those I was his wife, living on the isolated stations in the Apostle Islands, and part of the time at Two Harbors, Minn., where one might as well be on an island for all the social life one is able to have....There was always too much to do around home...to spend any time getting to town.

On the islands, we always had to keep up two homes, as women and children have to be off the islands Oct. 15, and when you have two homes to maintain, something has to be slighted. We slighted necessities. Luxuries—we had none of them. We gave up the things we needed.

On Devils Island, in storms the spray used to dash against my living room windows, 600 feet from the cliffs, and ooze through the windows and flood the floor, so that I would have to take rags and sop it up. Such a mess it always made.

I spent six years on that island. Tourists used to come from Bayfield, and that was all the social contact I had. We always seemed to be on lonely outposts....We're through with lighthouses now, and I am glad.

The writer of the article gave Mr. McLean the last word: "I liked them, or I would not have spent 35 years keeping the lights going." ³³

Unfortunately, neither of Lee Benton's wives has left behind her impressions of life on Raspberry Island. The few photographs that have survived document some of the happy times when visitors from the "main shore" and from other islands in the Apostles group provided the "social contact" that Mrs. McLean so sorely missed when she was on Raspberry (figs. 6-9).

This side of island life also appears occasionally on the staid pages of the station log:

1904	September 2:	Started to even the ground on the NE side of dwelling for croquet ground. [The work was completed on November 22.]
1914	August 16:	Keeper [Benton] with family and Miss Sopher visited at Sand Island Lt Sta and had a very enjoyable time.
1919	July 31:	Putting up a new swing.

33 Quoted in Stella M. Champney, "Four Days of Terror," *The Detroit News*, May 17, 1931, Feature-Fiction Section, pp. 5, 10. In the same article, Mrs. Robert Carlson told of four terrifying days alone on Michigan Island in winter, while Mrs. Emmanuel Luick spoke more cheerfully of her life on Sand Island and Mrs. Frank Covell of life at Split Rock Light on the North Shore of Lake Superior.

1921	July 4:	[Walter Parker and family visiting from Devils Island for the 4th, left at 2 A.M.]
	September 18:	A visiting party came out to day, danced in the warehouse to night, left for town 2 A.M.
1922	July 22:	Mrs. and Miss Lutz and Miss Grimm of Ashland is visiting with the keeper.
	August 14:	Keeper returned today with his sister Mrs. George Koons of Chicago, Miss Grimm and Miss Lutz of Ashland for a weeks visit.
	October 1:	A party came out from town today for a good time.
1923	August 19:	...playing horseshoe and croquette.
	August 26:	1st and 2nd Asst. playing croquette.
1932	November 24:	[to celebrate installation of the new fog signal equipment] a very elaborate dinner was served by Mr. & Mrs. Barningham [1st Assistant] for all keepers & construction crew.

The two most popular games among the island families seem to have been croquet and cribbage. The croquet ground Keeper Hendrickson laid out on Raspberry Island in 1904 was matched by similar grounds on other islands and was the scene not only of family matches but of tournaments between teams from other light stations and from the mainland. "We were all pretty good at that," recalled Vernon Barningham.³⁴ Two cribbage boards in the Lakeshore collection testify to the popularity of that ancient indoor game on Raspberry and Michigan Islands and elsewhere in the Apostles. They used to play cribbage and dominoes and various card games during the winter, as well. According to Marjorie Benton, her husband's family and others "used to have their little tournaments and go around from house to house when they were in town and...probably from island to island when they were out."³⁵

The socializing among the Apostles lightkeepers' families continued during the winter, which several of them spent in Bayfield. Being outsiders (mostly from Michigan), they did not mingle very much with the local community. In fact, they even tended to live in close proximity to each other; across from the high school on School Hill was "kind of lighthouse corner," according to

34 Vernon Barningham, interviewed by Marjorie F. Benton, n.d., APIS transcript. The Bentons' own croquet set has survived and is presently on display in the Apostle Islands National Lakeshore visitor center in Bayfield.

35 Marjorie F. Benton, interviewed by David Wallace, David Snyder, and Diane Chalfant, June 8, 1989. The Bentons' cribbage board and set of dominoes and the Lanes' (of Michigan Island) cribbage board are in the APIS collection.

Lee Benton's daughter-in-law, who was not a member of the lighthouse community but heard a lot about it later from her husband, Harold Benton. Besides the regular meetings and activities of the Odd Fellows and Rebekahs, to which most of them belonged, they liked to get together for square dances and card parties, or just to sing. On these occasions "the kids would be brought and they would park them on beds with pillows around." They also liked to play little pranks on each other, like waiting until a couple had gone to bed and then knocking on their door and telling them to get up for a surprise party or dance.³⁶

Reading was "very important" to the lightkeepers' families, a fact that the Lighthouse Service recognized by providing boxed circulating libraries to those of its stations not situated in or near urban areas.

These are arranged in cases so constructed that they make rather a neat appearance when set upright on a table, and they only must be closed and locked to be ready for transportation. They contain on an average about fifty volumes each, of a proper mixture of historical, scientific, poetical, and good novels, together with a Bible and a prayer book.... There are now [1890] five hundred and fifty of these libraries in circulation.... In their distribution preference is given to those stations most distant from towns and villages.³⁷

The arrival of the new collection of books, usually when the district inspector came in the middle of the summer, was a red-letter day on the lighthouse calendar. "Every time we'd get a library," recalled one of the Great Lakes lighthouse children, "everybody would grab a book and sit in the corner and read."³⁸

Keeper Benton and His Family

Although interpretation of the Raspberry Island Light Station will cover the entire period of its operation as a manned light (1863-1947), it will focus primarily on the decade 1914-1924, when Lee E. Benton was keeper. This period has been chosen mainly because quite a number of artifacts associated

³⁶ Ibid.

³⁷ Arnold Burgess Johnson, *The Modern Light-House Service*. 51st Congress, 1st Session. Senate. Executive Document No. 56 (Washington: Government Printing Office, 1890), pp. 103-04. An original Life Saving Service library case is in the U.S. Coast Guard Academy Museum, New London, CT.

³⁸ Kozma, ed., *Living at a Lighthouse*, p. 68. In the APIS collection there is a book from Michigan Island Light Station with the U.S. Light-House Establishment bookplate: *A Sawdust Doll*, by Mrs. Reginald DeKoven (APIS 1421). A large number of books discarded by the Detroit Public Library were in the Bayfield home of Bess Benton at the time of her death; daughter-in-law Marjorie Benton thinks that these were "lighthouse materials," but was not sure whether they had anything to identify them as U.S. Light-House Service books.

with the light station at that time have been acquired from the Benton family, along with photographs, family letters, and other documents, which provide a fairly clear picture of life on Raspberry Island at that period of its long history. The following information on the several members of the Benton family has been brought together to help the Apostle Islands National Lakeshore staff personalize their interpretation of the lighthouse complex and focus it on a period midway between the primitive conditions of the 1860s and the coming of automation in the 1940s.

Keeper Benton

Lee Ellsworth Benton was born in Veliskey (present Villisca), Iowa, on or about October 21, 1872, the son of A.M. and Eleanor (Huff) Benton.³⁹ Nothing is recorded of his childhood. By May 1897, when he enlisted in the Michigan National Guard, he was a "sailor" living in Cheboygan, Michigan.⁴⁰ He saw service in the Spanish-American War as a private in Company 2, 33d Regiment of Michigan Volunteers, took part in the battle of Aguadore [sp?], and was discharged in December 1898 with the comment: "Character as a soldier good. Service faithful."⁴¹ After the war he enlisted in the United States Navy, serving as coxswain on USS *Vixen*, *Amphitrite*, *Marietta*, and *Alabama* during the four years of his enlistment. He was commended for his

39 Benton's birthplace was listed as Veliskey, Iowa, on his discharge from the Michigan Volunteers in 1898 (APIS 1425); his 1913 discharge from the Wisconsin Naval Militia (APIS 1423) lists Sidna [Sidney?], Iowa, as his place of birth. Both towns are in the southwestern corner of the state. The date of birth is derived from his death certificate which gives his age at death (November 12, 1924) as 52 years, 1 month, 22 days.

40 Certificate of honorable discharge at the expiration of his three year enlistment, May 24, 1900 (APIS ?).

41 Certificate of discharge on the mustering out of his company, Cheboygan, Michigan, December 5, 1898 (APIS 1425).

“fearless devotion to saving life under difficulties” as a member of *Marietta’s* lifeboat crew, who saved the life of a fisherman off La Guayra, Venezuela, on the night of November 25, 1902.⁴² There is a family tradition that Benton spent some time in Annapolis after the war and there taught “the last course in square rig sailing offered at the Naval Academy.”⁴³

With this background, it is not surprising that Benton was described as “a very military man, straight as a ramrod, and always wore a campaign hat.”⁴⁴ He was rather short (5 feet, 6 1/2 or 7 inches tall), with a fair complexion, blue or gray eyes, and brown hair. Photographs taken when he was in his forties show him to have been of a stocky build with the weathered face one would expect of a man who spent much of his life on the water (figs. 10, 16).⁴⁵

Still a bachelor, Benton joined the U.S. Light-House Service on April 1, 1905, as 2nd assistant at Devils Island Light Station, under Keeper Alexander McLean. At the beginning of the next season (April 7, 1906) he married Anna J. Klein of Cheboygan and just three days later was promoted to 1st assistant at Devils Island. He held that position until his transfer in 1910 to the newly opened Split Rock Light Station on Lake Superior’s North Shore, about 50 miles north of Duluth, Minnesota.⁴⁶ After two years at Split Rock, he moved in December 1912 to the mainland light at Two Harbors, Minnesota.

42 Pension certificate no. 1,214,576, awarding Lee E. Benton \$12.00 a month, dated December 9, 1922 (APIS 1427); letter of commendation from Charles H. Darling, Acting Secretary of the Navy to Coxswain L.E. Benton, U.S.Navy, Washington, January 3, 1903 (APIS 1424).

43 Statement attributed to Marjorie F. Benton, in Walter Parker interview, 1982, p. 10.

44 Walter Parker, interviewed by Kate Lidfors, April 8, 1982, APIS transcript. The APIS collection includes two photographs of Benton in his army and navy uniforms (APIS 350 and 369).

45 Vital statistics from APIS 1423 and 1425, discharges; photographs in APIS collection, dating from about 1910 to 1922.

46 Rathbun, “Light Stations,” p. 70, 111; obituary of Mrs. Anna J. Benton, *Bayfield Press*, May 7, 1920. Keeper Hendrickson noted that Mr. and Mrs. Benton stopped briefly at Raspberry Island on July 16, 1906, on their way back to Devils Island from town (Raspberry Island, station journal). In one of the Benton family photograph albums (APIS), there are a number of snapshots of Mr. and Mrs. Benton and their son Harold, born in 1907, including figs. 5, 15, 16, 19; a formal photograph of the three Bentons was also taken about this time (APIS, Acc. 219).

Little more than a year later, the Bentons moved again. On June 19, 1914, Keeper Alexander McLean of Raspberry Island Light Station tersely noted in his log: "Lee E. Benton of Two Harbors arrives at station 9 P.M. to take charge of the station as Keeper." What prompted this mid-season shift of command on Raspberry Island is not recorded. Since ex-Keeper McLean stayed on for two years as Benton's 2nd assistant, before transferring to Huron Island Light, Michigan, as keeper in 1916, it is possible that the change had been made at McLean's own request, for unstated personal reasons. Benton and McLean were well acquainted, Benton having served as 2nd and 1st assistant to McLean on Devils Island from 1905 to 1909.⁴⁷

Benton's eleven-year tenure as keeper of Raspberry Island Light was marked by no particularly dramatic events or technological changes, aside from his taking charge in 1921 of the acetylene lamps on Sand Island and the York Island Shoal buoy. The Raspberry Island lamp continued to burn kerosene, its fog signal to operate by steam. Except for the station motorboat, the equipment was essentially the same as it had been since 1903 and definitely less sophisticated than the equipment Benton had operated at Split Rock, with its diesel-powered air compressors (fig. 12) and incandescent oil vapor (IOV) lamp. Living conditions on the island were also somewhat more primitive, since Raspberry lacked the central heating, indoor toilets, and hot water baths the Split Rock families enjoyed.

However, Lee Benton was well equipped to manage his station. He was not only an experienced sailor, but a skilled mechanic, carpenter, and plumber as well, capable of handling almost all of the building and apparatus maintenance and minor construction that a lighthouse keeper might face during a season. The Light House Service provided annual inspection and repair of the boilers in the fog signal and work parties to rebuild docks and put up new structures when needed, but for the most part Benton and his assistants had

⁴⁷ Raspberry Island, station journal, June 19 and 26, 1914; May 9, 1916. Ole Kristiansen held the position of 1st assistant under both McLean and Benton (1913-16). Rathbun, "Light Stations," p. 70, suggests a serious family health problem may have led to McLean's temporary relinquishment of the principal keeper's responsibilities.

to manage on their own. The extracts from Benton's station journals for 1915 and 1922, quoted on pp. 8-11, above, illustrate his and his assistants' versatility as handymen.⁴⁸

In his spare time, Benton enjoyed making ship models and doing embroidery, both skills he presumably developed during his years as a sailor. His daughter-in-law still has a half-model of a three-masted vessel that Lee made for his second wife (fig. 13), and he is known to have made several others that he gave to friends among the lightkeepers' community. He also made toy boats for Harold, one of which survives in the park collection (APIS 246), and he is said to have built Harold a sailboat that he used for trolling.⁴⁹ Surviving examples of Lee's needlework include an apron and two bolster covers (APIS, accession 219). A miniature painting on a shelf fungus (APIS 281) offers yet another hint of the artistic side of Benton's nature. Benton was also an avid photographer, although he did not turn his interest to profit as did his neighbor Emmanuel Luick, keeper of Sand Island Light.⁵⁰

One thing that Lee Benton did not do in his spare time was fish, at least not as a commercial venture. This was rather unusual at the time, when practically all the Apostles lightkeepers supplemented their income by catching fish and selling them to the Booth Company. If Benton did anything to earn extra money during the winter in Bayfield, it has not been recorded.⁵¹

Raspberry Island was noted during Benton's time as something of a showplace, largely because of the colorful, well-tended flower beds that framed the neatly kept keeper's dwelling (figs. 4, 7). How much this owed to Lee Benton's green thumb rather than Anna's is uncertain, but he probably

48 A small notebook (APIS 388) of Lee Benton's, begun while he was still in the navy, contains a number of entries relating to supplies needed for house carpentry projects. After he bought a house for his second wife in 1923, he put in his own furnace, besides building a storm entry on the porch, plastering, etc. "You know how it is with me now," he wrote to his son, "every time I come to town I do as much as I can at the house." Lee Benton to Harold Benton, Bayfield, Wisconsin, November 16, 1923 (APIS 477).

49 Marjorie F. Benton, interview, 1989; Marjorie Benton, in her interview with Walter Daniel and Isabel Daniels Knapp.

50 Emmanuel Luick operated a photography studio, The Pioneer Gallery, in Iron River, Wisconsin, when he was not keeping light on Sand Island. Information courtesy Apostle Islands National Lakeshore.

51 Rathbun, "Light Stations," p. 71; Walter Parker, interview, 1982.

did much of the work in this part of the garden between 1919 and 1923, during his first wife's illness and after her death. His second wife took on the flower beds during their last summer on the island.⁵²

Although she never knew Mr. Benton except at a distance as the father of a schoolmate, Marjorie Benton, who married Harold Benton several years after his father's death, has the impression that he was "a fun-loving person." This is borne out in the photographs Benton took of Bessie Grimm and her friend Evelyn Lutz "just having a good time" while on their well-chaperoned visit on Raspberry Island in August 1922.⁵³ Although there is no hint that he was like the assistant at Split Rock in 1913 who got "tanked" when he went to town, Benton was no teetotaler, even during prohibition, as his young visitors found out in 1922. Evelyn recalled the incident with amusement almost 60 years later:

He had made some sand cherry wine, so he treated us all. When he kept filling my cup, my mother said, "That's enough for her," and he said, "Oh, it won't hurt her." Well, it really went to my head. Bess and I prepared the vegetables for supper and so on, and we asked where to put the garbage, and he said, "Out by the white post." I saw a whole row of white posts, so I said, "Whish white posht?"⁵⁴

In May 1920, after 14 years of marriage, Lee Benton lost his wife, Anna, to tuberculosis. At the end of the 1920 lighthouse year, Lee and 13-year-old Harold went west for several months to visit Benton relatives in the state of Washington, returning in time for the unusually early reopening of Raspberry Island Light on April 11, 1921.⁵⁵

Since Harold had missed most of a year of school and had no one to take care of him in Bayfield, his father enrolled him as a boarding student at

52 Rathbun, "Light Stations," p. 71; Lee Benton to Harold Benton, May 27, 1924 (APIS 2038).

53 See figures 9, 14, 18, and other photographs in the APIS collection donated by Evelyn Lutz Durocher; also, Durocher interview, 1980. See Appendix A for a humorous letter to Lee Benton from Keeper Lane of Michigan Island.

54 Evelyn Lutz Durocher, interview, 1980. Sand cherry wine is "just like port wine," according to Edna Lane Sauer (interview, 1982). Lightkeeper Harry Thompson, 1st assistant at Split Rock Light, whose 1913-19 diary affords a somewhat more intimate view of life in a lighthouse than the station journals, got "tanked" on an off-duty trip into town on August 20, 1913 (transcript courtesy Split Rock Lighthouse, Two Harbors, Minnesota).

55 Marjorie F. Benton, interview, 1989; Raspberry Island, station journal, June 29, 1919; May 15, 1920; April 11, 1921.

Northland Academy in Ashland, twenty miles to the south, and rented a room from a Mrs. Lutz in Ashland for his own use when he came ashore for the winter. While living in Ashland, he came to know Bessie Grimm, a young schoolteacher, who lived “kitty-cornered from where he was staying.” The following summer of 1922, Bessie and her best friend, Evelyn Lutz, were Benton’s guests on Raspberry Island twice, from July 22 to 29, with Mrs. Lutz as chaperone, and from August 14 to 19, with Mr. Benton’s sister Laura (Mrs. George Koons), of Chicago. A year later, on August 28, 1923, Bessie Grimm and Lee Benton were married in Ashland; the following day the keeper of Raspberry Island Light brought his bride out to the island.⁵⁶

That fall Lee and Bess, as he called her, spent as much time as they could ashore, renovating the house he had bought in Bayfield, described in the local paper as “a splendid home...the former Presbyterian parsonage property, where he...made many and extensive improvements.”⁵⁷ Benton’s letters to his son that fall are full of news about the work they were doing to fix up the new home. “I wish you were in Bayfield the week ends,” he told Harold, still at Northland Academy in Ashland, “I could give you a job every Saturday at the house.”⁵⁸ Bess stayed on the island almost to the end of the 1923 season, leaving for town on November 23d. Lee closed the station on December 5th.

Lee and Bess’s marriage appears to have met with general approval. The letters to Harold that fall and next spring suggest that he and his step-mother

56 Marjorie F. Benton, interview, 1989; Raspberry Island, station journal, July-August, 1922; August 29, 1923; wedding announcement in *Bayfield Press*, August 24, 1923.

57 *Bayfield Press*, November 12, 1924.

58 Lee Benton to Harold Benton, Raspberry Island, October 6, 1923 (APIS 2036). This letter and five others from father to son between October 1923 and May 1924 are reproduced in Appendix A of this report.

were on affectionate terms from the start and they remained close for the rest of her life. The first Mrs. Benton's sister-in-law in Cheboygan wrote to offer her family's "congratulations and best wishes for a long and happy married life," adding that "they all thought that you did right; now you won't have to go through life alone and you'll be much happier."⁵⁹

Sadly, Lee and Bess's marriage came to an abrupt end little more than a year after the wedding. After an uneventful summer, punctuated by visits from Benton and Grimm relatives, Harold went back to school in mid-September. Two months later, his father was stricken with apparent appendicitis. On November 9, 1924, the station log records, "2nd Asst took the Keeper and wife ashore this A.M. on account of Keeper beening [sic] sick." On the 11th the 2nd assistant had to go to town; he returned to Raspberry Island the next day "with news that Keeper Lee E. Benton of this station was dead at Ashland hospital."⁶⁰ The cause of death, as officially recorded, was "intestinal toxemia" resulting from an "obstruction of the bowels."⁶¹

After funeral services at the First Presbyterian Church in Bayfield on November 14 or 15, Mrs. Benton and Harold went out to Raspberry Island "to pack up there [sic] furniture to take home with them." On the 22d the station crew got up steam in the signal building, lowered the keeper's furniture down the tramway to the dock, and loaded it on the tender *Amaranth* for delivery to Mrs. Benton in Bayfield.⁶²

59 Abbie (Mrs. Nicholas) Kline, Cheboygan, Michigan, to Lee Benton, November 11, 1923 (APIS 2040).

60 Raspberry Island, station journal, June 17, August 1-16, September 10-15, November 8-12, 1924. Family tradition blames "a storm delay" for keeping Benton on the island too long before he could get to the hospital, but Benton's station journal entry for November 8, "a fine day," says nothing of his being ill. If there was a delay, it was probably because the attack came on during the night of November 8/9 and they waited for daylight to get the keeper to the hospital.

61 Lee E. Benton, death certificate, November 12, 1924, Ashland County Courthouse, Ashland, Wisconsin. The obituary in the *Bayfield Press*, November 12, 1924, stated that Benton "was taken suddenly and violently ill last Sunday [November 9] while at the light station" and was rushed to the Ashland General Hospital "where an examination showed him to be suffering with intestinal trouble demanding a hurried operation," which was performed "this Wednesday forenoon [November 12], but was unavailing."

62 *Bayfield Press*, November 12, 1924; Raspberry Island, station journal, November 16-22, 1924.

“The sudden death of Mr. Benton brings sorrow to many Bayfield people,” concluded the *Bayfield Press*, “for he was a splendid type of man, industrious and a good citizen.”⁶³

The Two Mrs. Bentons

Lee Benton’s first wife, Anna J. Klein, was born in Holland on November 18, 1879, and came to America with her parents when she was six months old. The family lived for a while in Saginaw, Michigan, before settling permanently in Cheboygan. It was there that she met Lee Benton, whom she married on April 7, 1906, and immediately accompanied to Devils Island Light Station in the Apostle Islands, where he was the 1st assistant keeper for the next three years. Two photographs (fig. 5) taken outside their quarters at Devils Island show Lee and Anna Benton sharing the task of washing clothes outdoors. They spent the winters in Bayfield, where their only child, Harold, was born in April 1907 (fig. 16).⁶⁴

From 1910 to 1912 the Bentons were stationed at the new Split Rock Light Station where, though remote from town, they enjoyed such amenities as furnace heat and an indoor bathroom. Their next station, Two Harbors Light, was closer to town but isolated by snow in winter, as the wife of another keeper complained some years later:

Winters I was shut in by unbroken snowdrifts down in the railroad yards which shut off the lighthouse from the town, and while the men folks got the children out to school and back, by the time I was ready to go anywhere, the roads were drifted full again. And ma could stay home.⁶⁵

Whether Anna Benton felt the same way is not known.

In 1914 the Bentons moved once more, back to Wisconsin and the Apostles, when Lee took over as keeper of the light station on Raspberry Island. An apartment on School Hill in Bayfield became their winter home and the Bentons became active members of the lighthouse community. Anna belonged to several local organizations—the Rebekahs, the Royal Neighbors, the

63 *Bayfield Press*, November 12, 1924. See Appendix B for the full obituary.

64 Obituary of Anna J. Benton, in *Bayfield Press*, May 7, 1920; Marjorie F. Benton, interview, 1989. Anna’s sister-in-law spelled the family name Kline (see footnote 59).

65 Mrs. Alexander McLean, quoted in Champney, “Four Days of Terror,” *The Detroit News*, May 17, 1931.

Yeoman, and the Beavers. She was remembered as a “very quiet person” and a hard worker, who liked to do fancy needlework and get together with the other wives to sing and play the guitar. One photograph (fig. 15), taken outside their Bayfield home, shows Anna dressed for house work. Another taken on Raspberry Island in 1915 or 1916 shows her in a more playful mood, pushing her friend Mabel Eddy along the front walk in a wheelbarrow (fig. 7).⁶⁶ Among the lighthouse group, her special friends seem to have been Mrs. Elizabeth Lane (Michigan Island), Mrs. Anna Olson (Outer Island), and Mrs. Josephine Marshall (Devils Island).

In 1919, Anna Benton’s health began to give way. The trouble started with influenza in December 1918, brought on, it was said, because she insisted on scrubbing the Rebekahs’ hall in freezing cold weather.⁶⁷ Whatever the cause, tuberculosis was the result. Although Anna moved out to the island at the end of May 1919, she stayed less than a month. A trip to town “for medical treatment” on June 21 was quickly followed on June 29 by her admission to the Maple Crest Sanatorium at Whitelaw, Wisconsin. She returned home to Bayfield in December after the light station’s closing left her husband free to help out at home through the winter. Lee went back to Raspberry with his two assistants on May 5, 1920, but must have returned to Bayfield almost immediately, for on the morning of May 7 Anna Benton died at home. The funeral service and burial took place in Cheboygan, Michigan, on May 9, 1920, and on May 15, Lee Benton returned to Raspberry Island. “While ashore,” he noted in the station journal, “Keeper’s wife died and he took the body to Michigan for burial.”⁶⁸

“Mrs. Benton was a woman of delightful personality,” the writer of her obituary reported, “a kind and loving wife and mother, whose presence in the home will be sorely missed by the husband and the young son Harold.”⁶⁹

As mentioned above, Lee Benton and his 13-year-old son spent most of the ensuing year together on the island and visiting relatives in Washington State. When Harold entered Northland Academy in the fall of 1921, his father took a room in Ashland for the winter and there made the acquaintance of the young lady who was to become his second wife.

66 Mabel Eddy’s father, John Eddy, was keeper of Raspberry Island Light Station from 1895 until his death of a heart attack in 1900 at the age of 43.

67 Marjorie F. Benton, interview, 1989.

68 Raspberry Island, station journal, May 31, June 21 and 29, 1919; May 5 and 15, 1920; *Bayfield Press*, May 7, 1920. Anna Benton’s obituary is quoted in full in Appendix B.

69 *Bayfield Press*, May 7, 1920.

Bessie A. Grimm was a schoolteacher in Ashland when she met Mr. Benton. She was then about 30 and he was 49. With her best friend, Evelyn Lutz, "Miss Grimm" made two visits to Raspberry Island in July and August 1922, Evelyn's mother and Benton's sister acting as chaperones. The two young women "made their own fun," as Evelyn recalled, "dressing up in crazy clothes," beachcombing, swimming in the lake, dancing on the sand, playing records on the Edison phonograph, and singing to the accompaniment of a banjo and a guitar. "Our night under the stars was just superb," she remembered (figs. 9, 14, 18).⁷⁰

Bessie Grimm's memories of those two weeks on Raspberry Island were never recorded, but they certainly must have contributed to her acceptance of Lee Benton's proposal of marriage the following year. The wedding took place on August 28, 1923, at the Ashland home of Bessie Grimm's parents, Mr. and Mrs. P.H. Grimm.

The keeper brought his bride out to Raspberry Island the very next day and she stayed until mid-November. Every chance they got she and Lee came ashore to work on the house he had bought in Bayfield for their winter residence. Lee and Bess (as he always called her) both made a point of keeping in touch with Harold by weekend visits while he was at school in Ashland or by letter.

At the end of April 1924, for instance, Lee reported to Harold:

Today we done some work on the motor boat and went to the sand point for the row boat. Bess has been cleaning house and isn't finished yet. She has been cleaning the wood work and washing windows and putting up curtains. She started the upstairs today.⁷¹

To Lee's next letter, Bess added a playful postscript that gives a hint of the good bond she established with her young stepson:

We all send our best "Meow" and a purr or two. We are good cats—but we do catch a lot of birds—and we get spanked for that. We wonder why....

Lots of love from

Bess

70 Evelyn Lutz Durocher, interview, 1980.

71 Lee Benton to Harold Benton, Raspberry Island, April 30, 1924 (APIS 2037).

Jiggs is out by the coal shed, I guess asleep. But ~~here~~⁷² is his mark...Frolic's signature [paw print] pickled in sand cherry juice.

After an uneventful summer, marked by visits from several family members including Bess's parents, Harold went back to school in mid-September while Bess stayed on Raspberry Island with her husband. Their time together was short. Lee Benton's sudden illness on November 9th brought them ashore the same day; three days later Bess was a widow at the age of 33.⁷³

Lee Benton died intestate and there is no record of what he left his survivors, aside from the house in Bayfield and his furniture on Raspberry Island, which was delivered to Bess on November 22d. Fortunately, Bess Benton had a college degree and some years' experience as a teacher. She went on for additional work at the University of Minnesota after Lee's death and taught French and German for many years at Superior Normal School (later State College) in Superior, Wisconsin. She retained possession of, and often spent her summers in, the home she and Lee had established in Bayfield. Bess Grimm Benton died in 1968.⁷⁴

During her short stint as wife of Raspberry Island's principal keeper, Bess Benton probably had little opportunity to make many changes in the way the keeper's dwelling was furnished. Her major contribution perhaps was that she saved and passed on to Harold and Marjorie, her stepson and his wife, a substantial number of objects that had been used in the Bentons' island home.⁷⁵

Harold Benton

Lee and Anna Benton's son, born in Bayfield on April 15, 1907, was seven when his father became keeper of Raspberry Island Light. From then until his mother died in 1920, he regularly spent his summers on the island and the rest of the year in Bayfield, where he attended the public schools. His education was interrupted for the better part of a year after his mother's

72 Lee and Bess Benton to Harold Benton, Raspberry Island, May 27, 1924 (APIS 2038).

73 Raspberry Island, station journal, June 17; August 1-16; September 15, November 9-22, 1924.

74 Marjorie F. Benton, interview, 1989.

75 Most of the pieces she gave to Harold and Marjorie during her lifetime, along with those they acquired as her heirs, which have an association with Raspberry Island, have been given to Apostle Islands National Lakeshore by Mrs. Marjorie F. Benton (see Appendix C).

death, when he and his father went to Washington to visit relatives. In the fall of 1921 he entered Northland Academy in Ashland as a boarding student. After graduating from the Academy he stayed on for two years at Northland College. At the time of his father's death in 1924, he was 17 years old, probably in his first year of college.⁷⁶

As a summer resident of Raspberry Island between the ages of 7 and 17, Harold Benton apparently led a fairly typical boy's life, which may have included some small chores around the house and lighthouse, although his main responsibility seems to have been hunting the rabbits that swarmed on the island and made gardening difficult. He also hunted waterfowl and in his teens "practically put himself through college by trolling," selling "a box of fish or two" every time the Booth Company's boat came by."⁷⁷ From his father he learned to enjoy sailing and woodworking and he had an interest in nature without being a bird watcher or butterfly chaser.⁷⁸

Other Occupants of Raspberry Island, 1914-1924

Assistant Keepers and their Families

Of the seven men who served as Keeper Benton's 1st assistant and ten who held the post of 2nd assistant, little is known aside from their names and, in a few cases, whether or not they were married and had families.

Most of the assistants during this period were married and, at any given time, usually at least one of the assistants had children as well. Alex Mc-

76 Marjorie F. Benton, interview, 1989.

77 Marjorie F. Benton, in interview with Walter Daniels and Isabel Daniels Knapp Cassidy. See also fig. 19, showing Harold at 15.

78 Ibid. Unfortunately, Harold Benton died in 1975 before the oral history program got under way at Apostle Islands National Lakeshore, so his memories of life on Raspberry Island have been lost, except for things he told his wife, the former Marjorie Fisher, of Bayfield. Marjorie and Harold were born in Bayfield the same year, but were in different grades in school there and scarcely knew each other until after Mr. Benton died. Marjorie Benton, therefore, never saw Raspberry Island when the Bentons lived there, but has recorded some of the information he passed on later.

Lean (1914-16) had four; Archie Harmony (1919-1923) had two; Tom Hessing (1923-28) also had two. "Johnny" Ball (1919-21) and Herbert "Toots" Winfield (1922-1930), on the other hand, were bachelors. The summer population of Raspberry Island thus varied from year to year, but typically included five or six adults and three to five small children (see list of Benton's assistants on p. 7, above). ⁷⁹

During the Benton years, the keeper lived on the east side of the keepers' dwelling, and the 1st assistant in the west half of the same building, while the 2nd assistant occupied either the "shack" next to the barn or upper floor of the warehouse. At least one 2nd assistant (Almond Cummings, 1916) left after two days because there was no room for his family. ⁸⁰

Although McLean's demotion to 2nd assistant must have made his relationship with the new keeper somewhat peculiar, there is no hint in the station journal of trouble among the keepers or their families. One purpose of the inspector's or district superintendent's visits each summer was to mediate in cases of intra-island discord, but the inspection reports for the 11th district have not survived, so there is no way of knowing if such disputes occurred while Benton was keeper. ⁸¹

79 Compiled from Raspberry Island, station journal, 1914-1930. Walter Parker, who knew Benton in the early 1920s, recalled that "Archie Harmony was out there with Mr. Benton, and Johnny Ball, and Toots Winfield. Neither one [of the latter] was married." He remembered Archie's wife and her sisters and the two Harmony daughters, Lucille and Doreen. A photograph of little Doreen Harmony in her father's work boots is in the Benton family album (APIS collection).

80 Postcard, Anna Benton to Mrs. G., July 1914 (Appendix A); Raspberry Island, station journal, June 17 and 19, 1916.

81 Herb Winfield, Benton's last 1st assistant, later got crossways with residents of the Bayfield area when he was suspected of collaborating with Federal revenueurs to help catch alleged bootleggers. Ironically, he himself was suspended twice in 1930 for being intoxicated on duty and shortly after left Raspberry Island station. See Rathbun, "Light Stations," p. 71; Raspberry Island, station journal, July 24, 1930.

Visitors

While the Light House Service regulations made it clear that keepers could not accept any fee from visitors for admission to the lighthouse or for accommodation at their station, there was nothing to prevent them from entertaining relatives and friends for the day, overnight, or even for weeks at a time, so long as their presence did not impede the carrying out of the keepers' duties. Keepers were, in fact, enjoined to "be courteous and polite to all visitors," strangers included, and to "show them everything of interest about the station," although the watch room and lantern were off-limits between sunset and sunrise."⁸²

Probably the most frequent visitors between 1914 and 1924 were fellow lightkeepers and their families from other stations in the Apostles group. Visiting back and forth was a regular thing in those days, whether for a whole day or just to stop by on the way to or from town. Particularly while Anna Benton was alive, the Bentons exchanged visits with the Frank Marshall and Walter Daniels families from Devils Island and the Lanes from Michigan Island; less frequent visitors included the Joseph Sextons from Long Island and the Emmanuel Luicks of Sand Island. Sometimes they made joint visits to Devils or Oak Island to pick blueberries or raspberries; sometimes they would have a picnic supper on the lawn and play croquet.⁸³

Visits from relatives of the keeper's or the assistants' families and friends occurred less frequently, but these visitors were likely to spend several days or a week or more. Miss Mabel Eddy came out "to visit with the keeper's family" on August 9, 1915, and left on August 18 (figs. 7-11); next year she came again on July 28 and was followed by "Miss Mae Rockwood and Master Loyal Close" from August 8 to 16. Asst. Keeper Archie Harmony's mother-in-law and sister-in-law and her children came out three times in June and July 1919. After his wife died, Lee Benton had occasional visits from friends: "Mr. Lloyd Brigham, sister and cousin," "Mrs. Mary Ross, Miss Finley, of Bayfield," and most notably Bessie Grimm and Evelyn Lutz from Ashland and chaperone (twice in June and August 1922). During their last summer

82 Light-House Board, *Instructions to Light-Keepers and Masters of Light-House Vessels*, 1902 (Washington: Government Printing Office, 1902), p. 5.

83 Walter Parker, interview, 1982; Raspberry Island, station journal, June 11, July 2 and 9, August 20 and 22, September 30, 1915; July 6 and 24, August 20-22, September 2, 1916; May 24, June 10, August 28-29, September 20-21, 1917; August 10-11, 14, 16-18, 1918. The Marshalls, Parkers, or Lanes stopped at Raspberry at least 21 times during the summer of 1919, probably more often than usual because Lee Benton's wife was away at the sanatorium and they were concerned about how Lee and Harold were getting along. After Anna's death, the station journals record relatively few of these inter-island visits.

on the island Benton and his new wife entertained “Mrs. D.A. Benton & daughter” (August 1-16), “Mrs. Webster and daughter Edith of River Falls, Wis.” (August 3-8), and Mr. and Mrs. P.H. Grimm, Bess Benton’s parents (September 10-15). Where all these visitors, as many as four at one time, slept is nowhere recorded; either Harold gave up his room temporarily or the visitors may have spilled over into the assistant’s side occasionally.⁸⁴

Other visitors came just for a day, sometimes in excursion groups of as many as 60 people. A typical journal entry records that, on September 17, 1915:

The yacht *Zenya* [*Xenia* ?] with Mrs. Dr. Hull and party arrived at station at 12 noon. They had dinner on the lawn, stayed at station three hours, leaving at 3 p.m.

In 1921 two men in a canoe stopped overnight (June 12), “a large party from Madeline Island landed” (August 3), “a visiting party came out..., danced in the warehouse..., left for town at 2 a.m.” (September 18).

The next year “a large party came out from town on the gas boat *Illini*, stayed till after sundown” (September 7), another party stayed from 1 to 8 p.m. (September 28), and yet another party came out from town on October 1 “to have a good time.” “A party of 60 from the mission” (August 13, 1924) represented one of several visits over the years from the summer resort known as the “Old Mission” on Madeline Island.⁸⁵

One other kind of visitation varied the routine of life on Raspberry Island. Every year a Light House Service machinist came out for a few days to test the fog signal boilers and engines and make whatever repairs they needed. In 1915 this was a Mr. Strachan; in 1919-20, John Miller; in 1921-22, Leslie Miller. He presumably was put up in one of the quarters. When a “working party” came out to carry out major construction, as in November 1925, the year after Benton died, and in 1932 when they replaced the steam fog signal, the keeper had to provide both food and sleeping accommodations for the extra workers. In 1932 some were even quartered in the “laundry.”⁸⁶

84 Raspberry Island, station journal.

85 Ibid.

86 Ibid., August 6-13, 1915; July 13-15, 1919; June 3, 1920; June 29-30, October 1, 1921; June 12, 1922; October 31-November 10, 1925; September 27-November 26, 1932. On September 26, 1932, Keeper Wilks put a stove in the laundry and “arranged it for sleeping quarters.”

EVIDENCE OF ROOM USE AND FURNISHINGS

Keeper's Quarters

In November 1905 Capt. Charles Keller, Light House Engineer, 11th District, wrote to the Light House Board, recommending conversion of the existing keeper's dwelling at Raspberry Island Light Station from a single "into a double house, providing room for two families and one unmarried assistant." This had become necessary because the installation of the fog signal in 1903 had required the addition of a 2nd assistant to the keeper's staff. The one-room cabin or "shack" then occupied by the 2nd assistant was considered inadequate.¹

A little less than a year later, on October 14, 1906, "the keepers... moved into the new dwelling." Whether this meant all the keepers is unclear, although the sparse evidence suggests that the 2nd assistant was still out in the cold. In 1913 the 2nd assistant "set a cookstove upstairs in the warehouse to do his cooking"; in May 1916 the roof of the "2nd asst shack" was painted; and in June of the same year, a new 2nd assistant quit after two days, complaining that there were "no quarters for his family."² Not until 1926 was there a reference to a kitchen on the 2nd floor of the assistant's side of the main dwelling, although it may have been there since the 1906 alterations. In 1929 it is clear that the 2nd assistant, a family man, was living on the more roomy first floor of the building and the unmarried 1st assistant upstairs in the same building. The changeover may have taken place as early as 1919 when Archie Harmony came on as 2nd assistant, with a wife and two children, and John Ball, a bachelor, came as 1st assistant. The same situation prevailed in

1 Capt. Charles Keller, Light House Engineer, 11th District, to Light-House Board, Detroit, November 15, 1905 (RG 26, National Archives, Washington, DC: Light-House Board correspondence file no. 3655).

2 Raspberry Island, station journal, October 14, 1906; September 2, 1913; May 13, 1916. Where Alexander McLean, his wife, and four children lived after his demotion to 2nd assistant (June 1914-May 1916) is a mystery. With the Bentons occupying both floors of the keeper's quarters and 1st Assistant Kristiansen and wife on the ground floor of the other side of the house [see fn. 4], the only spaces left for the McLeans were the three-room apartment on the second floor of the assistants' quarters, the one-room "2nd assistant's shack" behind the main building, and the upper floor of the warehouse.

1923-24 when bachelor Herbert Winfield became 1st assistant and Tom Hession, father of two, became 2nd assistant.³

No such uncertainty surrounds the keeper's side of the dwelling erected in 1906. From the beginning the principal keeper occupied the eastern half of the structure (figs. 20-23). His quarters, facing roughly south and east, consisted of three rooms downstairs, three upstairs, and a basement.⁴

There were two entrances, one from the front porch on the south side through a small vestibule into the living room, and one from the back porch directly into the kitchen.

The first floor rooms included a living room at the front, a dining room on the east side, a small pantry, and the kitchen. Upstairs there were three bedrooms. The basement contained the water cistern and some storage room; the only access was from the kitchen.

The keeper had direct access to the light tower through doors on the first and second floor; there was no door between the keeper's and the assistants' quarters.

For heat, the keeper had a heating stove in the living and dining room and a cookstove in the kitchen; the rooms above drew heat up from below through a

3 Raspberry Island, station journal, November 26, 1926; July 12, 1929 ("2nd asst basement").

4 On an undated, unmailed postcard (APIS 2204) to "Mrs. G," written about a month after their move to Raspberry Island, Anna Benton described their new quarters: "We live on the right side of the tower & the 1st lives on the left. There are 3 rooms down & 3 up & 4 big closets & 2 pantryies [sic] & a large cellar." She failed to mention where the 2nd assistant (Alex McLean), his wife and 4 children were living.

grate installed in the dining room ceiling in 1904 and another in the kitchen ceiling, dating from 1931, long after Benton's time.⁵

Since the structure was not electrified until 1941, kerosene lamps provided the only lighting in the keeper's dwelling in Benton's time.⁶

From the time the house was remodeled in 1906, water from the lake was pumped up to the dwelling and stored in cisterns under the keeper's and assistants' quarters. A pitcher pump in each kitchen drew water from these cisterns for cooking and washing, but there were never any indoor bathrooms at Raspberry Island station.⁷

There were screens on the windows and doors during the summer, replaced by storm doors and windows in October. Before the 1906 remodeling there were outside shutters; none appear in photographs of the remodeled building.⁸

5 Ibid., October 11, 1904: "cut a hole in the dining room siling for a register"; this was in the old dwelling but incorporated into the new building in 1906 as two registers in the front and middle bedrooms. Ibid., August 29, 1931: "installed register in keeper's kitchen to allow heat to go up stairs."

6 Rathbun, "Light Stations," p. 71, citing Walter Parker (undated interview with Roy Tull), dates the installation of house wiring to 1932, when the air diaphone fog signal was installed. However, the Coast Guard's copy of the 1905 drawings for Raspberry Island Light Station bears the notation "Lighting & wiring added 1941" on the first and second floor plans. In further confirmation of this late date, Frances Carpenter Platske, who came to live on Raspberry in 1941, remembers the house wiring as "newly installed, probably the year before we got there."

7 In a 1982 interview, Mel Erickson, former caretaker on Raspberry Island, stated that the Light House Service used to "come in with a great big boat and you filled those tanks [in the basement] full of water from the lake," but the station journals clearly show that the keepers got up steam in the fog signal to pump or "syphon" water from the lake to fill the signal cistern and the two house cisterns (October 17, 1907; April 19, 1919; May 4, 1923; etc.). The earliest reference to the kitchen pump in the station journal was on May 1, 1925 ("worked kitchen pump"), but the pump was pictured on one of the 1905 construction drawings (fig. 23).

8 Raspberry Island, station journal, May 17, 1915: "cleaning windows & putting on screens in dwelling"; August 27, 1915: "Making storm doors for dwelling"; October 15-16, 1915: putting up storm doors and storm windows. A screen door is visible in a 1922 photograph of Lee and Harold Benton sitting on the front porch (fig. 17).

The outside of the dwelling was painted white and the roof red. Outside doors were varnished. Screens and storm windows and doors were painted an unnamed, dark color.⁹

Front Porch

The keeper's front porch or verandah measures about 15 feet in length by 4 feet 5 inches in depth (fig. 21) This was not screened in until 1931. At the west end of the porch is the only exterior door to the light tower. This door and the front door of the dwelling appear to have been varnished in Keeper Benton's time. Benton also mentioned painting his "verandah floors" in 1915, but the only reference to a color—"lead"—dates from 1938.¹⁰

Photographs (figs. 14, 17) taken while the Bentons were on Raspberry show the keeper's rather shallow front porch bare of furniture.

Vestibule

The front door opens from the porch into a small (5'2" x 3'2") vestibule, leading in turn into the southeast corner of the keeper's parlor or living room (fig. 21).

Physical evidence on the plaster wall to the right suggests that there may have been a board there with several coat hooks, about 5' 10" from the floor. There was a window shade on the outer door and a curtain mounted on a spring rather than a rod. The hardwood floor has been refinished. The walls and ceiling are painted off-white.

9 Photographs from 1922 and earlier show white paint on the siding and trim. The red roofs on the dwelling and fog signal are mentioned in the station journal, May 3-6, 1916, and "varnishing outside doors on dwelling" on May 31, 1915. The screen door frame and probably the window screens appear dark in photographs (APIS 0257 and 561), but there is no record of the color.

10 Raspberry Island, station journal, May 18 and 31, 1915; September 24, October 6, 1931; October 6, 1938.

Living Room

Originally the dining room of the pre-1906 dwelling, this room, somewhat altered, became the “parlor” in the remodeled dwelling (fig. 21). Keeper McLean called it his “sitting room” (1911); later keepers used the term parlor (1928) and, more often, living room (1926-31). Although Keeper Benton never mentioned this room in the station journals, he did refer once, in a 1923 letter, to the living room in his house in Bayfield. It is reasonable to assume that he would have used the same term for the equivalent room at the light station.¹¹

As remodeled in 1906, the room is 15'11" wide and 12'8" deep, with an alcove or bay on the south side, 9'10" wide by 3'2" deep, framed by a rectangular archway. A double window in the alcove looks out on the front porch. Besides the vestibule door, there are doors leading to the second floor, to the dining room, to the kitchen, and to a closet in the northeast corner. On the east wall is a chimney with a flue opening, now covered, for a heating stove. The existing brass electric light fixture in the center of the ceiling probably dates from 1941, when the house was first wired.

The woodwork in this room, except for the floor, retains its original varnish finish.¹² The plaster walls are painted white; a paint study is needed to determine earlier paint colors. A modern dropped, acoustical tile ceiling hides the original painted plaster ceiling.

The room was used, as the name suggests, mainly for leisure time activities such as reading, singing and playing the banjo or guitar, listening to phonograph records, and playing games, especially cribbage.

Living Room Furnishings: Raspberry Island

Only once between 1903 and 1939 was a specific item of furnishing in this room mentioned in the station journal. On September 9, 1904, Keeper Hendrickson noted that he had “put up the heating stove in the dining room”;

11 Raspberry Island, station journal, October 11, 1904; April 27, 1911; June 2, 1926; May 14, 1928; April 23, 1929; September 10, 1931; Lee Benton to Harold Benton, October 6, 1923 (APIS 2036).

12 Raspberry Island, station journal, April 27, 1911: “varnished woodwork, sitting room”; April 29, 1929: varnished floor, living room; September 10-11, 1931: varnished woodwork, living room. The hardwood floor has recently been sanded and refinished with clear polyurethane, leaving no evidence of the original finish or placement of floor covering or stove pad.

two weeks later he cut a hole in the ceiling for a register to let some of the heat rise into the bedroom above. When the house was remodeled two years later, the dining room became the living room. While a living room or parlor stove was never specifically mentioned, there are numerous references to hardwood and coal for use in the “house” or “heating” stoves and no reference to an oil-burning stove at Raspberry until the keeper got an oil range for his kitchen in 1939. It is safe to assume, then, that there was a coal-burning heater in the living room during Benton’s time; its size and style are not known.¹³

Although there is no contemporary description of the Bentons’ living room on Raspberry Island, a 1907 photograph (fig. 16) of Anna Benton with new-born Harold shows part of the parlor in the Bentons’ Bayfield home. The discernible furnishings are a bucolic print in a white frame and an archway with swagged portieres. Neither of these would have been out of place in the living room at Raspberry eight to twelve years later.

Among the Benton things given or left to Harold and Marjorie Benton by Bess Grimm Benton, Harold’s stepmother, were a number of pieces that may have been used in the living room at the lighthouse. Particularly notable is Lee Benton’s Edison Amberola VI phonograph (fig. 48), with matching oak stand and 31 Edison cylinder records, including “When the Bell in the Lighthouse Rings” and “The Lighthouse by the Sea.” This is the “old-fashioned Edison with the circular records” remembered by Evelyn Lutz Durocher from her 1922 visit to Raspberry Island.¹⁴

Equally notable is a half-model of a three-masted sailing ship (fig. 13) made by Lee Benton for his second wife and now owned by her stepdaughter-in-law, Marjorie Benton of Bayfield, Wisconsin. Mounted in a deep shadowbox, this almost certainly hung on a wall of the Raspberry living room during the Bentons’ last summer on the island.¹⁵

13 Raspberry Island, station journal, September 29, October 11, 1904; October 12, 1907; May 4, 1929; July 31, 1931; May 22, 1939.

14 APIS 203-204 (31 Edison cylinder records and 23 tubes), APIS 205 (Edison Amberola VI), and APIS 235 (stand, with drawers for records).

15 Marjorie Fisher Benton, interview, 1989. Interestingly, Christy McLean Ethan (interviewed by David Snyder, APIS, July 19, 1989) recalled that “somebody built a boat for my dad with all the little sails and everything on it,” for which her father made a deep, glassed-in frame. This hung on a wall in the McLeans’ quarters on Raspberry and at Two Harbors but has since been lost. Since Benton worked with McLean at Devils Island and Raspberry Island, it is quite possible that it was Benton who made this ship model for Mrs. Ethan’s father.

Other Benton possessions in the Apostle Islands National Lakeshore collection that may have been used in the keeper's living room include a large rug, an Aladdin kerosene lamp with brass base and glass shade, a table runner with the letters U.S.L.H.S. embroidered on it, a hand-held stereoscope and several stereographs, a humidior, a cribbage board and set of dominoes, a postcard album, a miniature slide projector and slides, about 20 books, and some smaller items.¹⁶

The following specific memories of the Raspberry living room before and after the Bentons lived there have been gleaned from interviews with keepers' children and friends.

Christy McLean Ethan, daughter of Keeper Alexander McLean, Lee Benton's immediate predecessor, recalled from 1909-16:

We had chairs and a couch and whatever you had.... I think we had one big, big rug, kind of had roses in it and stuff, that my dad bought...in the living room.... [Also] a couple of rocking chairs—I forget just exactly what—and a couch¹⁷ [covered with] a fabric and it was in front of the windows, out to the [bay].

Evelyn Lutz Durocher, Benton's guest for two weeks in 1922 and a close friend of the second Mrs. Benton, remembered a few furnishings without explicitly placing them in this room:

I just remember it [the house] had chairs and table. I remember there was a sewing machine, an old-fashioned Singer sewing machine. I recall also he had a victrola, an old-fashioned Edison with the circular records....It seems to me that there was a banjo and guitar that someone played. I can't recall who played it, but we would have sung along. [She did not remember a piano.]¹⁸

Mabel Barclay and Frances Barclay Collins, daughters of David Barclay, 2nd assistant on Raspberry Island in the late 1930s, remembered that "at Raspberry in the twenties [sic], the living room of the keeper's area had a sewing machine."¹⁹

Frances Carpenter Platske, daughter of Alva Carpenter, keeper of Raspberry Light from 1941 to 1943, remembered the room well:

16 APIS accessions 15, 39, 51, 69, 152, 219, 222, 223, 247, received from Mrs. Marjorie F. Benton, 1978-1986. For complete list, see Appendix C.

17 Christy McLean Ethan, interviewed by David Snyder, APIS, July 19, 1989.

18 Evelyn Lutz Durocher, interviewed by Kate Lidfors, APIS, August 19, 1980.

19 Cited in Rathbun, "Light Stations," p. 43; presumably the interviewees were speaking of the thirties rather than the twenties.

Well, I think I used it [the parlor] more than my folks did. They used it mostly to play cards, but in here was an old record player. My father would get old records for me that were discarded from a jukebox at [?] Beach, and I had a stack about 4 feet high.... That record player, the kind that had a picture of Master, the dog—that was right by the window looking over the porch. Here was a daybed which had a [?] headboard.... Here was the typical library table, almost identical to the one on Outer [Island], almost identical to the one in Two Harbors....

[Interviewer:] You said the typical arrangement of the library table where they had some books on the lower part and a doily or a piano scarf running the long way, hanging—

[Platske:] Long, narrow, white, crocheted on the end. I don't ever recall seeing one that was embroidered. Seems to me they were all lace, you know, crocheted. [She said they had the same rug they had on Outer Island and some rocking chairs, but thought the curtains were in place when they moved in. They had electricity, "newly installed," and she had to learn to turn out the lights whenever she left a room.]²⁰

A photograph (fig. 24) taken about 1945, when Earl and Thyra Seseman occupied the keeper's quarters, shows one corner of their "living room"; furnishings include a rug, windsor rocker, mission library table, upholstered sofa or daybed, and an electric floor lamp. Except for the library table, none of these looks earlier than the 1930s.²¹

Living Room Furnishings: Other Islands

Since most of the Apostle Islands lightkeepers and their wives came from the upper Great Lakes area, had fairly similar backgrounds and incomes, and faced approximately the same conditions in their temporary quarters, it appears that there was a basic similarity in their household arrangements and furnishings. To an unusual degree, therefore, evidence of furnishings on Devils or Michigan or Outer Island from the early 1900s to the early 1940s is relevant to the situation on Raspberry Island between 1914 and 1924. The recollections of several lighthouse keepers' children, as they apply to the quarters they occupied other than those on Raspberry Island, are presented verbatim in Appendixes E and F. What they had to say about their living rooms is summarized in the following paragraphs.

20 Frances Carpenter Platske, interviewed by David Snyder, APIS, July 7, 1989.

21 APIS negative no. 1289, from the collection of Thyra Seseman. The configuration of the room in this photograph does not fit the keeper's living room on Raspberry Island; perhaps it was taken in one of the bedrooms or on Devils Island. In a letter to Marjorie Benton, July 3, 1982 (copy, APIS), Mrs. Seseman wrote that they moved their furniture from Devils Island to Raspberry in 1945. In 1947 they moved to the Ashland Breakwater Light Station. When they moved to California, Laurie Nourse took all their furniture to "his place on Rice's Island."

On Michigan Island, before 1929, what was intended to be the keeper's parlor served as a bedroom, and the dining room doubled as a sitting room.

From his childhood on Devils Island, about 1925-1934, Elmer Christensen remembered a "regular table and chairs," a leather-covered reclining chair, and a large coal heater. At Eagle Harbor, they had a large heating stove with "a lot of nickel plating on it and isinglass windows."

Several references to Arcolas in the station journal appear to indicate that these oil-burning heaters were used in the keepers' quarters on Michigan Island between 1929 and 1933. At Au Sable Light in the late 1930s, the principal heater was a similar oil-burning stove, "like a Heatrola."

Frances Carpenter Platske remembered that the living room on Outer Island, 1935-41, was painted "a pale cream" with a stencilled border. The "sparse" furnishings included a long leather-covered couch, an oriental pattern rug, an oak library table with a shelf and a "long lace table cover," an oak rocking chair, and a victrola. The room had no stove and no musical instruments. Pictures she remembered, though not specifically associating them with the parlor, included "Old Ironsides," "The End of the Trail," and a little girl "looking up at the birds in the tree"; they did not have a photograph of the current president (Roosevelt) or of Lincoln or Washington.

Dining Room

The keeper's dining room, approximately square (15'8" x 15'2"), forms the one-story east wing of the 1906 structure (fig. 21). Two doors on the west wall provide access from the living room and the kitchen/pantry. There are single windows on the north, east, and south walls. Original varnished doors, door and window casings, and baseboard survive intact, but the hardwood floor has been sanded and refinished with polyurethane, the walls covered with paneling, and the ceiling with acoustical tile. The three-light, brass ceiling fixture matches the living room fixture and presumably dates from the introduction of electricity in 1941. Evidence, if any, for a heating stove flue opening in the chimney on the west wall is hidden by the modern paneling.

This room was designated "Dining Room/Keeper's" on the original building plan and was invariably referred to as the "dining room" in the station jour-

nals, although it also served as the keeper's watch room and office in Alex McLean's day (1909-14) and Alva Carpenter's (1941-43) and possibly in between.²²

Dining Room Furnishings: Raspberry Island

The station journals contain no mention of dining room furnishings, since they would have been the property of the keeper, with the exception of the station journals and other official records, stationery, etc., on the keeper's desk, and the station barometer mentioned on June 9, 1912.²³

When Alexander McLean was keeper on Raspberry Island (1909-14) the McLeans used this as a dining room only on Sundays and special occasions; it also served as the keeper's office/watch room and Mrs. McLean's sewing room.

In the dining room there was nothing but the dining room chairs and...a dining room table, a square one, heavy oak one, with those big curled legs...kind of circular legs going down, beautiful.... [They also had a] sideboard, long and low...with a mirror behind it and kind of little things [shelves] on either side. [They had no china cabinet on Raspberry,] just the sideboard and table.

There was a thing [kerosene lamp] that came down over the dining room table.... You know, we used that dining room only for company and on Sundays, because we had chicken every Sunday....

There was a desk in that dining room area...a roll-top, but it was kind of a big one. The roll-top was way in the back part...not too deep.... [Her mother had the sewing machine in the dining room.]

My dad was a Scotch Catholic—there aren't many of them—and my mother was a convert. Anyway, every Sunday at 10 o'clock we'd go into the dining room and each one of us would kneel at a chair and he would read the rosary and say some of the litanies, four or five litanies....Take about three-quarters of an hour; keep us on our knees till they were breaking off. [For these services, Christy was required to put on white stockings and shoes.] [Keeper McLean stood his watch daily from 8 a.m. to 4 p.m., but that simply meant that he "just had to be around," not in the watch room the whole time.]²⁴

22 Raspberry Island, station journal, May 26, 1913; May 19, 1919; November 9 and 17, 1931; May 9, 1934; Christy McLean Ethan, interview, 1989; Frances Carpenter Platske, interview, 1989. Mrs. Anna Benton called it the dining room on a postcard, ca. 1916-18 (Benton collection, APIS).

23 Raspberry Island, station journal. Keeper Carpenter hung the barometer in his dining room/watch room on Devils Island (1935-41); probably it was common practice to place it and the station clock in whatever room the keeper used as his office.

24 Christy McLean Ethan, interview, 1989.

There is no description of the dining room when the Bentons were on Raspberry Island, although Evelyn Lutz Durocher recalled from her 1922 visit, without specifying where they were in the house, “chairs and table” and “an old-fashioned Singer sewing machine.”²⁵ Two chairs and an extension table, a rug, and lace curtains can be seen in the Benton’s Bayfield dining room in a 1907 photograph (fig. 16). A photograph taken at the time of Evelyn Lutz’s visit shows a straight-hung lacy curtain and a dark window shade in the east window of the dining room (fig. 4).

Extant furnishings that the Bentons may have used in the Raspberry dining room include three chairs (figs. 44-45), six dinner plates, four salad plates, a berry bowl and six matching saucers (fig. 46), six plated knives and forks, napkin rings, a bread knife, a carving set, and a number of other pieces of table china and glass.²⁶

The keeper’s annual property returns for Split Rock Light Station on Minnesota’s North Shore clearly indicate, by the omission of any articles of furniture, that whatever the keeper used as a desk he had to supply himself. The Light House Service did supply all the forms and stationery he needed, along with things like penholders and steel penpoints, lead pencils, slates and slate pencils, ink and an inkstand, and blotting paper.²⁷

From 1941 to 1943, recalls Frances Carpenter Platske, this room was “Dad’s office”; her family did not use it as a dining room. The only piece of furniture she remembered was an oak roll-top desk; she thought there must have been other things there, but felt “it was a rather barren looking room,” with no carpet. The house had been wired for electricity shortly before they moved in. See below for Mrs. Platske’s more vivid memory of her father’s office/watch room on Outer Island, 1935-41.²⁸

25 Evelyn Lutz Durocher, interview, 1980.

26 APIS collection, acquired from Mrs. Marjorie F. Benton; see list in Appendix C. Mrs. Benton (interview, 1989) said that her husband’s stepmother passed on to them the china and silver that had belonged to Harold’s mother, Lee Benton’s first wife.

27 See Appendix D for Split Rock’s 1925 return. The property returns for Raspberry and other Apostle Islands light stations do not appear to have survived.

28 Frances Carpenter Platske, interview, 1989.

Dining Room Furnishings: Other Islands

In the dining room of the old keeper's quarters on Michigan Island, the Lanes had "an oak table with leaves" and several chairs, recalled their daughter, "and Dad had a beautiful desk...with a roll top," given to him by a friend; on it stood the keeper's barometer. The desk was between two big windows and had a rocking chair on either side for Mr. and Mrs. Lane. In one corner was a stove, replaced in the warm months by a stand. Another stand held a tray with pitcher and glasses. A closet held the station's medicine chest and Keeper Lane's uniform.²⁹

Frances Carpenter Platske's memories of Outer Island (1935-41) include many details of the "watch room," as they called the room next to the kitchen. The one piece of furniture she remembered was a big roll-top desk, at which her father would sit to "fill in the journal" every evening by the light of an Aladdin lamp. On one of the white walls hung the government clock and brass barometer and by the kitchen steps was a rectangular, oil-burning stove. There were scatter rugs on the hardwood floor. A closet, formerly a pantry, held old *National Geographic* magazines that the district inspector used to drop off every year.³⁰

Pantry

Located off the "passage" between the dining room and kitchen, the pantry (4'8" wide by 3'5" deep) provided storage space on open shelves for dining room china and glassware and, probably, for some kitchen crockery and non-perishable foods and condiments. There is a narrow window on the east wall of the pantry (fig. 21). The passage itself is about 3 feet wide and has a door at each end, opening into the dining room and kitchen. Between the passage and pantry is an open rectangular archway with no apparent signs that it was ever closed off with hinged doors or curtains.

The floor and woodwork have original stain and varnish. The four shelves are unfinished; possibly indicating that they were covered with shelf paper. The plaster walls are painted a peachy beige color, the ceiling white. In

29 Edna Lane Sauer, interviewed by Kate Lidfors, APIS, April 8, 1982; same to Marjorie F. Benton, July 3, 1988 (copy, APIS). See Appendix E for a verbatim transcript of Mrs. Sauer's comments on the Michigan Island furnishings.

30 Frances Carpenter Platske, interview, 1989; see Appendix F.

1933 the “pantry and storeroom keeper side” were painted “cream.” Paint analysis may provide some clue to the color ten years earlier.³¹

There is a reference in 1934 to building a “cabinet for pantry,” but there is no evidence of it now.³²

Of the former residents of Raspberry Island only Frances Carpenter Platske has mentioned the pantry in an interview. “We had a pantry,” she said; “we had our dishes in here and the canned goods, flour, and cookies, and anything Mother wanted to cook with.”³³

Benton-associated artifacts that may have been stored in the pantry—mainly china and glassware that would have been used in the dining room or kitchen—are listed in Appendix C. An August 1922 photograph (fig. 4) shows a curtain and dark window shade in the pantry window.

Kitchen

The kitchen, which dates from 1906, measures 14’5" wide by 14’8" long (fig. 21). There are two windows, on the north and east walls, and five doors leading to the parlor, pantry/dining room passage, closet, cellar stairs, and the

31 Raspberry Island, station journal, October 24-26, 1933.

32 Ibid., August 31, 1934.

33 Frances Carpenter Platske, interview, 1989. It is not clear if she was speaking of the pantry or the kitchen when she listed these things but the pantry seems more likely, at least for dishes and canned goods. A June 21, 1907 station journal entry: “made a place in the cellar for extra supply,” may refer to extra supplies of food. Mrs. Anna Benton told a friend she had “2 pantries” in her new home on Raspberry Island (1914 postcard, APIS 2204).

back stoop. The sink has always occupied the northwest corner, directly over the cistern in the basement. Next to it on the west wall is the chimney, in front of which stood the stove.

The room retains its original stained and varnished woodwork (doors, door and window casings, chair rail) and its painted tongue-and-groove wainscoting.³⁴ The plastered walls are painted a pale green, the ceiling a brighter green; the color was identified as white in 1933 and may have been white before and after that, although this needs to be checked through paint analysis.³⁵

The kitchen floor was varnished or “oiled” from time to time. In May of 1922, for instance, Keeper Benton reported that he was “removing varnish of [sic] his kitchen floor”; two days later he was “oiling the keeper’s kitchen floor”; and a year later he was again “varnishing his kitchen floor.”³⁶ The “oiling” may refer to the use of a hard oil finish rather than a true varnish, although the terms were sometimes used interchangeably.³⁷

Along with its original finish, the kitchen floor retains readily visible evidence of at least two different-sized floor coverings, presumably linoleum or Congoleum. The largest and probably later covering extended wall to wall except under the sink, where there were built-in cabinets as early as 1945

34 The only journal reference to wainscoting (in the 1st assistant’s kitchen) indicates that it was painted, while the rest of the woodwork and the floor were varnished (June 15, 1932). Since the keeper’s and assistant’s kitchens were otherwise identical in layout and finish, it is assumed that the keeper’s wainscoting was painted also, probably white, although this needs to be checked.

35 Raspberry Island, station journal, November 22, 1921; November 6, 1933. In the mid-1930s on Michigan Island the 1st assistant’s kitchen walls were white, according to Grant W. Kirkendall and Romaine Kirkendall LaValley (interview, 1985). The property returns filed by the keeper at Split Rock Light Station in 1915 and 1925, indicate that white and straw color were the colors most used inside the buildings at that time, as well as in the 1930s when, as Robert Parker said in a 1985 interview, “about what we used then was white and spar paint.” Ben Hudak (Appendix F), however, remembered ivory and green as the predominant interior colors.

36 Ibid., May 5 and 7, 1922; June 9, 1923. The “Keeper’s Annual Property Return and Receipt,” filed by the keeper at Split Rock Light Station, Minnesota, August 18, 1925, lists both spar and floor varnish.

37 See United States Department of the Interior, National Park Service, “Historic Furnishing Report, Little Kinnakeet Life-Saving Station (1874-1915)/Coast Guard Station (1915-1954), Cape Hatteras National Seashore, North Carolina,” by David H. Wallace (draft, Harpers Ferry Center, 1989), p. 50, fn. 108.

(fig. 25). Surviving linoleum in the second-floor kitchen of the 2nd assistant may date to about the same period, shortly before the station closed.

The closet or storeroom on the south side of the kitchen still has four of its original shelves, supported by wooden cleats, and some original japanned clothes hooks. If this is the “storeroom” mentioned along with the pantry in October 1933, it was painted cream at that time.³⁸

Besides its obvious use for preparing meals, washing up, baking, and canning, the kitchen served a variety of other functions. The McLeans ate in the kitchen most of the time, except on Sundays or when they had company; so did the Lanes of Michigan Island before 1929 and the Carpenters of Raspberry Island in the early 1940s; very likely others, including the Bentons, did the same since this was a common practice in town as well as in the country. Clothes washing probably was done outside on Raspberry Island, as it was at Devils Island (fig. 5), but the women ironed in the kitchen, where there was a stove for heating the flatirons.³⁹

Saturday evening, Christy McLean Ethan recalled with amusement, was bath night for her and her brothers:

...there was no bathtub there, because we had the outside biffies, and every Saturday night my mother would get another big kind of a rug...those hand-woven rugs they had, a great big one. She'd put it on the kitchen floor and we had a great big tub, galvanized...and that's how we took our bath. I'd get in that tub and my brother, who's two years older than I—he would never think of coming in, but he'd rap on the door to scare me when I was in that tub, 'cause I was the only girl....We got in the tub with a nice big bar of Ivory soap.... It was fun.⁴⁰

Kitchen Furnishings: Raspberry Island

The kitchen sink is pictured in one of the 1905 construction drawings (fig. 23) as a bracket-supported metal or porcelain sink with a slightly angled drain-board reaching to the wall on the right and a pitcher pump sitting on the left

38 Raspberry Island, station journal, October 25-26, 1933. This may be one of the “2 pantries” Mrs. Benton mentioned in her 1914 postcard (Appendix A).

39 Ethan, Sauer, and Platske interviews.

40 Christy McLean Ethan, interview, 1989. The Lane children of Michigan Island, at about the same time, also bathed in a galvanized tub. “You were only plopped once,” Edna Lane Sauer recalls; “there were three of us to be plopped in the same water” (interview, 1982).

end of the sink. The drawing shows nothing but exposed piping under the sink.⁴¹

Besides the above-quoted passage about taking baths in the kitchen, Christy McLean Ethan's interview included a few other details of the Raspberry keeper's kitchen in the 1909-16 period:

The kitchen was big. [Her mother cooked on a wood stove,] black and silver like those wood stoves were, with a warming closet up above where you put the dishes in and keep the plates warm. [She was "sure" there were kitchen cupboards. Although she did not recall the kitchen pump, she felt there must have been one] because I can't remember us going outside and bringing all the water in. [The kitchen table was] a regular table to eat off of, [but she couldn't remember if it was round or rectangular. The bath tub was not stored in the kitchen. She was not sure whether the floor was covered with linoleum⁴² or rugs. She remembered a clothes wringer, but not where they used it].

Station journal entries that refer, directly or indirectly, to furnishings and fixtures in the keeper's kitchen are relatively few; these, along with a few that refer to the kitchens on the other side of the house, are extracted here:⁴³

Marigold delivered house coal, rations, and "cookstove." (August 18, 1906)

"making a box for the house coal..." and "made a stove coal box at the end of the wood pile." (October 15/16, 1906)

"Keeper washed painted walls and ceiling in kitchen" and the next day he "painted the two cupboards in keeper's quarters." (November 20, 1911)

Amaranth delivered 8 tons of "chestnut coal"; the next day the "stove coal" was put in the barn. (September 30, 1912)

"cut and wheeled hardwood for cookstove" (November 21, 1914)

"getting beach wood [i.e. driftwood] for dwelling" (July 21, 1920)

"worked kitchen pump" (May 1, 1925)

"fixed suction pipe, put on foot valve kitchen pump" (May 21, 1925)

"Removing varnish from sink and revarnished it" [possibly in assistant's quarters] (May 23, 1925)

41 While he was caretaker of Raspberry Island for the Ellerbee Company (1963-75), Mel Erickson found a pitcher pump on the lighthouse dump, cleaned it, and put it up on the second floor of the barn (Mel and Joyce Erickson, interview, 1982).

42 Ethan interview, 1989.

43 Raspberry Island, station journals, as cited.

"Sawed stove wood. Have about 27 cords sawed of stove length." (October 12, 1926)

"dusted rugs and carpet in Kprs. quarters" (November 6, 1926)

"Removed black iron 1 1/4" pipe line from cistern to kitchen on 2nd floor [of assistants' quarters], and put in new galvanized iron pipe instead, connected to hand pump." (November 26, 1926)

painted walls and ceiling in kitchen (May 9, 1927)

"renewed woodwork on sink" (May 24, 1927)

"varnished kitchen sink Kprs. qtrs." (June 11, 1927)

collected "birch wood" (July 4, 1927)

"made additional coal bin to hold supply of anthracite house coal" (August 5, 1927)

built, painted and enameled cabinet for 1st assistant's quarters (November 6-19, 1929)

"varnished congoeum in keeper's quarters." (November 8, 1929)

"Started to build cabinets for kitchen in keeper's and 2nd asst. quarters." (May 3, 1930)

"made new pump leather for 2nd asst. pump in his quarters" (October 9, 1930)

"sanded, shelaced [sic] & varnished woodwork in 1st asst. kitchen" (November 13, 1930)

scraped, sanded, applied two coats of varnish to floor in 1st assistant's kitchen (November 15-18, 1930)

"painted zink & stack in first asst. quarters" (June 6, 1931)

painted stove pipes in keeper's quarters (July 8, 1931)

"Installed register in keeper's kitchen to allow heat to go up stairs." (August 29, 1931)

"put metal top on sink in 1st asst. quarters" (October 7, 1931)

"varnished woodwork & floor in 1st asst. kitchen, also painted wainscoting" (June 15, 1932)

"put new grates in 1st asst. stove" (August 5, 1932)

"laying water line to dwelling" (June 12, 1933)

"completed piping on water line to quarters" (June 16, 1933)

“painted...white in keeper’s kitchen” (November 6, 1933)

“put up new oil range in keeper’s kitchen” (May 22, 1939)

“O.K. Bayfield Hardware bill for reservoir purchased June 6, 1939” (July 22, 1939)

“packed for shipment New Alton stove grates and fire box lining” (October 9, 1939)

Marjorie Benton, widow of Harold Benton, has donated to Apostle Islands National Lakeshore about 15 kitchen utensils, an embroidered apron, and a set of plain woven, sheer (“lawn”) kitchen curtains, that she thinks the Bentons may have used on Raspberry Island.⁴⁴ Photographs taken in 1922, particularly the one illustrated in fig. 4, appear to show a plain white curtain and a dark window shade in the east kitchen window.

Frances Carpenter Platske said that her family ate in the kitchen here in the early 1940s, as they did earlier on Outer Island. She wasn’t sure whether her mother cooked on a gas or oil stove (presumably it was the oil stove delivered to the keeper’s quarters in May 1939), but she had vivid memories of the time she tried to light it and nearly set herself on fire. She remembered that there was linoleum on the kitchen floor and a mirror near the back door. She thought there might have been an icebox in the basement. “We had a pantry.... We had our dishes in here [pantry or kitchen?] and the canned goods, flour, and cookies, and anything Mother wanted to cook with.”⁴⁵

The kitchen Fran Platske was remembering appears in fig. 25, a photograph taken about 1945 when Earl Seseman and his wife, Thyra, occupied the keeper’s quarters on Raspberry Island. Besides the oil stove and cabinet mirror over the sink, the photograph shows a modern porcelain sink with enclosed metal cabinet base; a towel bar and three towels on the wall to the right of the sink; a kitchen table and chair, painted a light color, possibly white, in front of the window; a pair of printed window curtains that hang only halfway down the window; and on the stove, a metal teakettle and coffee percolator.

44 See list in Appendix C. The Bromwell flour sifter in this collection bears a patent number which dates it to no earlier than 1930, although it is similar in appearance to sifters of the 1920s. The other utensils are less precisely datable and appear to be compatible with the 1914-24 period.

45 Platske, interview, 1989.

Kitchen Furnishings: Other Islands

From her childhood summers on Michigan Island in the early years of the 20th century, Edna Lane Sauer remembered that her mother cooked on a “wood-burning cookstove” with a shelf above it that held a coffee mill, tea and coffee pots, a “square yellow box” for tea and a canister for the coffee the children had to grind fresh every morning. Their home-made kitchen table was long enough to seat eight people on an “assortment” of chairs; both the table and chairs were painted gray or green. Opposite the cookstove was “a great big woodbox,” painted gray, with a lid that Mr. Lane sat on while he put his children through their exercises in the evening. In one corner was a “black iron sink with a pump” and next to it a roller towel. Her father enclosed one end of the kitchen to make a pantry with shelves and drawers and a flour barrel that swung out from under the counter. Her mother’s only cookbook was a little recipe booklet put out by the Royal Baking Powder people.⁴⁶

The Carpenters’ kitchen on Outer Island in the late 1930s had a pale green and yellow, wood-burning range, with a reservoir. Next to it was a sink and across the room some wall cabinets. A square oak table stood in front of the window; there was also a porcelain-top table, with two chairs. On the floor was “full length” linoleum, with a green pattern. The windows were curtained. Flour was kept in a bin, cookies in “the old green cookie jars.” Meat and other perishable foods were kept in the basement in a “screened-in shelved cabinet.”⁴⁷

Stairs and Upstairs Hall

From the keeper’s living room an enclosed stairway leads up to the second floor hall. The woodwork is varnished and the plaster walls and ceiling painted a peachy beige. Differential wear on the stair treads (fig. 26) indicates that in later years, at least, the steps were partly covered, probably by rubber stair treads.

46 Edna Lane Sauer, interview, 1982. See Appendix E.

47 Frances Carpenter Platske, interview, 1989. See Appendix F.

The only references to the stairway and hall in the station journal are one in 1930: "painted hall going upstairs in keeper's quarters"; and two in 1933: "finished painting hallway" and "scraped varnish off keeper's stairway."⁴⁸ There is little varnish on the center portion of each step, indicating perhaps that the stair treads were put down in 1933 and that thereafter only the outer edges of the stairs were varnished.

While there is no reference to painting the floor of the upstairs hall, there are references to painting the bedroom floors.⁴⁹ Like the bedroom floors, the hall floor today retains at least three layers of gray paint, the latest of which appears to have been put on around the floor covering, probably linoleum, then on the floor (fig. 26).

A naked light bulb in the ceiling of the hall dates from no earlier than 1941. Doors on the north, east, and south walls provide access to the three bedrooms (fig. 22).

Front Bedroom

The south or front bedroom (fig. 22) is the largest of the three upstairs rooms, measuring 15'11" by 11'2". A double window in the south wall offers a view across the lake to the main shore. A jog in the northeast corner marks the location of the chimney stack; there is no flue opening, however, for the room was heated from below through a register in the floor on the north side, in front of the door to the middle bedroom. Also on the north wall is the hall door and on the west wall are two more doors, one leading to a closet, the other to the second level of the tower, thus giving the keeper direct access to the tower at night without having to go downstairs and out on the porch.

The earliest reference to this room predates the 1906 remodeling. In October 1904 Keeper Hendrickson noted that he had "cut a hole in the dining room siling for a register," intended no doubt to warm the bedroom above; the floor and register in this room were retained when the building was enlarged two years later. Later references indicate that the softwood floor of the "keeper's bedroom" was painted at least four times between 1911 and 1938; at least

48 Raspberry Island, station journal, June 2, 1930; November 7 and 24, 1933. On May 15, 1930, they also "painted in 1st ass. hall leading up to his quarters." "Stair treads" were put on the tower stairs as early as 1929 (*ibid.*, June 24, 1929).

49 *Ibid.*, May 20 and 22, 1913; June 6, 1927; May 20, 1931; May 13, 1938.

three coats of paint are still on the floor, in varying shades of gray. In this bedroom there is no visual evidence of a floor covering that the painters had to work around. The plaster walls and ceiling were also painted periodically; in 1938 the color may have been cream; the last coat is a soft beige on the walls, white on the ceiling. The woodwork is varnished. ⁵⁰

The two-light electric ceiling fixture in this room and similar fixtures in the other two bedrooms date from the electrification of the house in 1941.

When the McLean family lived in the keeper's quarters (1909-14), Mr. and Mrs. McLean probably shared the front bedroom with baby Casimir ("cap"), born in March 1912; their daughter was in the middle room; and the two older boys in the back bedroom. As daughter Christy remembers:

I think they were iron beds...white cast iron beds, they were lovely. My parents had a big cast iron bed or brass bed and the kids did too, painted white as I recall....I think we had quilts on each bed. My mother made quilts, just for us, you know.... I think we had rugs by each bed.

Each bedroom had a chamber pot with a crocheted lid cover. She did not remember any dressers or other bedroom furniture, although she thought her parents may have had a washbowl and pitcher in their room. ⁵¹

Benton family items that may have been used in the keeper's bedroom during Lee Benton's 11 summers on Raspberry Island include a washbowl (without its pitcher); a quilt, white bedspread, and patterned blanket; 2 embroidered bolster covers and a pillow cover; Lee Benton's shaving brush; Anna Benton's Bible, 2 combs, 2 toilet bottles, and hat pin. There are also several small, framed family photographs more suitable for a bedroom dresser rather than in the parlor. ⁵² There is no photograph in the Benton collection that shows clearly what kind of shades and curtains were in the windows of this room, but they probably were similar to the dark shades and white curtains in the corresponding bedroom on the assistant's side in 1922 (fig. 3).

Frances Carpenter Platske was in her teens when her father was keeper of Raspberry Island light (1941-43). Usually she had the front bedroom, al-

50 Ibid., October 11, 1904; May 16, 1911; May 20 and 22, 1913; June 6, 1927; June 12, 1929; May 6 and June 4, 1930; May 20, 1931; May 6 and 26, 1932; June 21, 1933; May 12, 1938: "finished cream in signal, 2nd coat on keeper's bedroom."

51 Christy McLean Ethan, interviews, 1989.

52 See list in Appendix C.

though she “on occasion” switched to the middle room; her parents slept in the back bedroom with “little sister Lucy,” three years old in 1941.

Fran remembered that she used to fall asleep to the sound of the fog horn and wake up whenever it was turned off in the middle of the night; “the quietness would wake me up,” as she put it. She had an iron bed and a dresser, both painted blue, possibly the same ones she had had on Outer Island. The room had a painted floor with only a throw rug. All the bedrooms were lit by coal oil lamps.⁵³

Middle Bedroom

The smallest of the bedrooms, 11’11” square, the middle room has a double window facing east over the dining room roof; a closet off the northeast corner; a door on the hall; and another door, on the south wall, which connects, through a second door, with the front bedroom (fig. 22). Under the first door there is a floor register to bring heat up from the living room below; this probably was part of the register installed in 1904 and evidently split in two when the 1906 construction placed a partition across it to make two bedrooms where there had been only one.⁵⁴

Another relic of the old station building is the old floor, with boards running east-west, which covers about two-thirds of the room; the remaining third of the floor, on the north side of the room, dates from 1906 and has boards running north-south (fig. 27). The floor has been painted various shades of gray over the years and the last coat was painted around a floor covering then in place, probably a Congoleum “art-rug,” judging from its dimensions

The woodwork in this room is varnished and the plaster walls and ceiling are painted white. The two-light ceiling fixture dates from 1941.⁵⁵

53 Frances Carpenter Platske, interview, 1989. See Appendix E and F for comments on the bedrooms on Michigan Island and Outer Island.

54 Raspberry Island, station journal, October 11, 1904. The door on the keeper’s side does not appear on the 1905 floor plan, as revised in 1941. The middle room was probably designed so that parents in the front room could have ready access to small children in the middle room. Later, when there were no small children and more guests, the second door may have been added on the keeper’s side to provide privacy without cutting off the heat source in the middle room.

55 There is no specific reference to painting or varnishing in this room; for general references to bedroom finishes, see fn. 136. The ceiling light is on the 1941 lighting plan (fig. 22).

When the McLeans lived in the keeper's quarters, their only daughter had the "small bedroom...in the middle," between her parents and her two brothers. As previously noted, Christy McLean Ethan remembered that the bedrooms had white, cast iron beds, with quilts made by her mother, and a chamber pot and scatter rug by each bed. She did not remember having a dresser or a washbowl and pitcher. She did recall oil lamps in the bedrooms, which suggests that there was a table in the room.

Marjorie Benton does not know which room her late husband, Harold Benton, occupied during the summers from 1914 through 1924. As the only child of Anna and Lee Benton, he could have been in either the middle or the back room. Things in the Benton collection that Harold might have had in his bedroom include a pocket knife, a toy boat made by his father, a photograph of his father in a rowboat, a still bank, more than 100 clay marbles and an assortment of natural agates in a pouch, a battered bugle, a duffle bag, a pair of binoculars, a magnifying glass, a government-issue blanket, and a fishing jig (spindle, twine, lure, and hook).⁵⁶ A photograph taken in 1922 shows dark shades and white curtains in the windows of this room (fig. 4).

Three years after the Bentons' departure, a bolt of lightning struck the keeper's side of the building and knocked off a section of plaster from the wall of the middle bedroom. The summer damage was not repaired until the following November. Painting and varnishing in the bedrooms occurred several times between 1913 and 1938.⁵⁷

The floor coverings that once lay on the middle and back bedroom floors cannot be identified or dated with absolute assurance, although journal entries in 1926: "dusted rugs and carpet in Kprs. quarters" and another in 1929: "varnished congoleum in keeper's quarters," suggest that these two bedrooms as well as the hall and kitchen were furnished with durable, easy-to-clean floor coverings by the mid-1920s. "Gold Seal Congoleum," manufactured by the Congoleum Company, was a felt-based, hard-surfaced product similar in appearance to inlaid linoleum, but cheaper. It also had the advantage of lying flat without being tacked or cemented to the floor. Congoleum was available by the yard in rolls two or three yards wide or as room-size "art-rugs" with elaborate patterns and borders in imitation of woven rugs. The shadow on

56 APIS collection; see list in Appendix C.

57 Raspberry Island, station journal, November 11, 1927. For bedroom painting and varnishing references see fn. 50.

the floor of the middle bedroom measures approximately 7 1/2 by 9 feet, one of the sizes the “art-rugs” came in.⁵⁸

Frances Platske, who sometimes slept in this room during her summers on the island (1941-43), remembered “being in this room in a violent electrical storm” and watching from her east-facing window a lightning fire over on Oak Island. It is her impression that all the bedrooms had throw rugs over the painted floors.⁵⁹

Back Bedroom

Only slightly smaller than the front bedroom, the 14’5” by 10’6” back bedroom has two windows on the north wall, looking out over the station garden and outbuildings to the wooded interior of Raspberry Island (fig. 22). It has a closet on the south side, next to the hall door. Although the kitchen chimney goes up the west wall, there is no flue opening; heat from the kitchen stove came up through a register in the bedroom floor, installed in 1931.⁶⁰

The woodwork in this room is varnished, the plaster walls and ceiling painted white. The floor has at least three coats of gray paint, the last forming a border around a floor covering then in place, roughly 10 1/2 by 7 feet. The two-light electric ceiling fixture is like those in the other two bedrooms and dates from 1941.⁶¹

From 1909 to 1914 at least two of the three McLean boys occupied this room, then apparently unheated. During the Benton years it may have been Harold’s room but it also must have served on occasion as a guest room. In August 1922, for instance, when Keeper Benton’s sister stayed for a week, along with Bess Grimm and Evelyn Lutz, it seems likely that the two girls would have had the back room and Mrs. Koons the smaller middle room,

58 Ibid., November 6, 1926; November 8, 1929; see catalogs issued by the Congoleum Company, Inc., ca. 1920-22, trade catalog collection (TC 922-924, 927), Library, Harpers Ferry Center, Harpers Ferry, WV.

59 Frances Carpenter Platske, interview, 1989.

60 Raspberry Island, station journal, August 29, 1931: “Installed register in keeper’s kitchen to allow heat to go up stairs.”

61 For references to painting and varnishing in the bedrooms, see fn. 50.

while Harold may have moved in with his father or out to the “shack” in the back yard. Years later, Keeper Carpenter and his wife shared the back room with their little daughter Lucy, still in a crib.⁶²

The only evidence on this room’s furnishings consists of Christy McLean Ethan’s statement that all the bedrooms had white iron beds, home-made quilts, chamber pots with crocheted lid covers, oil lamps, and scatter rugs (but no dressers or washstand china) and Frances Carpenter Platske’s reference to her parents’ “big iron bed,” a dresser, and Lucy’s crib in her parents’ room. For the Benton years there is no evidence at all, not even a photograph showing the curtains, although these were presumably similar to the curtains in the other two bedrooms. At some time, possibly as early as the Benton era, the floor was covered with a rug, probably a Congoleum art-rug, measuring about 7’ by 10’6”.⁶³

Other Upstairs Furnishings

One of the lighthouse keepers’ descendants interviewed by Rathbun Associates in 1985 mentioned that the “library in bookshelves” provided by the Light House Service to its isolated stations was kept “upstairs” at Raspberry Island in the late 1920s and 1930s, but did not say whether it was in the hall or in one of the bedrooms.⁶⁴

Tower

The wooden tower is an integral part of the main station building, rising at the front and center, flanked by the two front porches. There are three entrances to the tower (figs. 21-22). Two are on the keeper’s side—one from his porch and the other from his bedroom. The third is on the assistants’

62 Christy McLean Ethan, interview and later conversation with David Snyder, 1989; Raspberry Island, station journal, August 14, 1922; Frances Carpenter Platske, interview, 1989.

63 Ethan and Platske interviews, 1989. See Middle Room, above, for discussion of Congoleum rugs.

64 Rathbun, “Light Stations,” p. 43. The source of this statement may be the Barclay sisters, whose recorded interview is too faint to transcribe.

side, at the foot of the stairs to the second floor. The base and roof of the lantern have always been painted black, the rest of the tower white.⁶⁵

Inside the tower (fig. 23), a wood staircase winds up to the third level; from there a metal ladder provides access to the lantern itself. As they were historically, the wooden stairs are varnished and the plaster walls of the tower are painted white.⁶⁶

A circular stain on the varnished floor at ground level marks the former position of the "weight flue," a metal tube, in two sections, that housed the weight for the clockwork that governed the rotational speed of the lens. Removed when the lens and clockwork were taken out after 1947, the flue has been rescued from the station dump and is now stored in the fog signal building. The lower section is 8' 9 3/4" long and the upper, 13' 1/2"; each is 10" in diameter, flaring at the ends to 12 1/2". The flue is painted brown. From the third level up into the lantern the weight cable was not enclosed.⁶⁷

The tower stairs are lighted by windows on the south side on the first two levels and two smaller windows on the east and west sides at the third level, just under the platform and lantern. Single naked bulbs in the ceilings of the first and second levels have provided additional illumination since the installation of electricity in 1941 (figs. 21 -22).

A photograph in the Benton collection (fig. 8), probably dating from about 1920, shows a lace curtain and dark window shade in the first floor window of the tower and a similar curtain in the window above. No curtain is visible in the third level window in a 1922 photograph (fig. 4).

Beginning in 1925, there are several references to canvas rugs or carpet in the tower. Since they are referred to in the plural, they may have been put

65 Raspberry Island, station journal, June 3, 1907: "painted the black part of tower"; June 1, 1916: "Painting black outside of lantern."

66 Ibid, May 9, 1912: "painting inside of tower"; June 3, 1915: "varnished tower stairs"; May 10, 1934: "painted inside of tower white."

67 Raspberry Island, station journal, May 20, 1916: "painted colum[sic] in tower." The "weight flue" is indicated on the first and second floor plans (figs. 21 and 22). It was also called the "weight shaft" (station journal, October 15, 1906).

down on each level, including the lantern, to protect the varnished floors or to help keep down dust. Painted canvas was used on the floor of the station boat, which may indicate that the tower rugs were painted also. "Stair treads," presumably of rubber, were put on the tower stairs in 1929.⁶⁸

Somewhere in the tower, perhaps on the first level, was a shelf to hold the watch book, in which each keeper recorded conditions and events during his watch.⁶⁹

Service Room

As in many other lighthouses, the small room below Raspberry Island's lantern was used for servicing the lens and lamps. Keeper McLean's reference in 1914 to cleaning brass "in trimming room in tower" and Keeper Benton's the following year to washing "lantern in tower, also service room" both appear to confirm that the third level of the tower was so used.⁷⁰

Physical evidence indicates that the southwest corner of this room once was occupied by a table or cabinet 42" long and 18" deep, probably with shelves above to hold the equipment and supplies needed for cleaning the glass, brass, and steel of the lens, lamp, plate glass windows, revolving apparatus,

68 Raspberry Island, station journal, June 13, 1925: "scrubbed rugs in tower"; August 17, 1926: "cleaned canvas rugs"; September 6, 1926: "cleaned rugs in tower"; June 24, 1929: "put stair treads in tower"; June 29, 1929: "scrubbed canvas for tower floor"; July 1, 1929: "painted canvas on floor of boat"; June 26, 1931: "washed lens, cleaned deck, put carpet down."

69 Raspberry Island, station journal, July 18, 1933: "base of tower varnished, rearranged shelf for watch book."

70 Raspberry Island, station journal, May 26, 1914; September 4, 1915. This was the case in several California lighthouses, including Alcatraz, Point Bonita, Fort Point, and Point Reyes (Shanks and Shanks, *Lighthouses of San Francisco Bay*, pp. 18, 34, 49-50, and *Lighthouses...Redwood Coast*, p. 37). While the term "watch room" was frequently used at other stations, it appears only once in the Raspberry Island journal: "painted watch room in assts part" (November 22, 1913), an obscure reference since it does not seem to apply to the tower at all. The "service room" was mentioned on September 4, 1915, and May 22, 1928, and the "supply room" on September 14, 1932. The term service room is adopted in this report because Keeper Benton used it and because it is more descriptive of the room's function than watch room.

clockwork, and ventilators in the lantern, as well as extra parts for the lamp and lens and clockwork apparatus.⁷¹

It is possible that the “service table” was made of metal rather than wood; if so, it would have been painted green at the beginning of the century and brown by 1915.⁷²

The 1915 and 1925 property returns for Split Rock Light Station included the following items that would have been kept in the service or supply room; the list for Raspberry Island Light in 1914-24 would have been similar, except that Raspberry’s Hains lamp used wicks rather than mantles. The quantities listed for each article are the number on hand at Split Rock at the time the returns were made, half-way through the season; at Raspberry Island quantities for some items would probably have been smaller. If Raspberry had a separate supply room, most of these supplies would have been there rather than in the service room.

<u>Name of article</u>	<u>1915</u>	<u>1925</u>
CLEANING EQUIPMENT AND SUPPLIES		
buff skins [chamois cloths]	4	1
corn brooms	6	3
clockwork brushes	1	1
hand dusters	5	1
feather dusters	2	2
scrub brushes, hand	4	1
silverplate brushes	2	1
wolf head brushes	1	1
mops	2	2
aprons, light keeper’s	2	0
crash towels	4	0
glass towels	8	3

71 Information from David Snyder, Historian, APIS. A notation in the Raspberry Island station journal, September 14, 1932: “built new shelves in supply room,” may refer to this space. On Michigan Island, before 1929, the “supply room” was in the base of the tower. It had “a counter with shelves under it and shelves above it, and a glass case on one side,” according to Edna Lane Sauer (interview, 1982); “there were all these brass measuring things and the brass lamps, and chimneys that had to be polished, and believe me, they were polished. Everything!”

72 *Instructions to Light-Keepers...1902*, p. 53, prescribes green paint for pedestals and service tables; *Instructions to Employees...1915*, p. 33, calls for “brown metallic” paint on service tables and other interior ironwork. Fort Point Light Station’s watch room furnishings in 1864 included “a small table for trimming wicks, a five-gallon oil carrier stand, a clock stand, and the like” (Shanks and Shanks, *Lighthouses of San Francisco Bay*, p. 49).

<u>Name of article</u>	<u>1915</u>	<u>1925</u>
hand towels	0	2
glycerin, in 3-lb bottles	2	1
ammonia	8 pts	1
Bon Ami, cakes	0	2
polish (powder) for glass, tin & silver	10 boxes	3
polish (paste) for brass and steel	4 boxes	1
Sapolio	2 cakes	1
soap, fresh-water	88 cakes	15
sal soda	0	1 lb
LAMPS, LANTERNS, and FITTINGS		
lamps, hand, kerosene	4	3
lamps, table-stand	4	4
lanterns, bulkhead	3	3
lanterns, hand, kerosene	3	3
chimneys, lens lamp, white [for 5th order Hains lamp at Raspberry]	60	60
chimneys, hand lamp, white	14	6
chimneys, tubular lamp, white	17	6
burners, hand lamp	2	3
burners, lens lamp	2	2
tripods, table-stand lamp	4	4
boxes, wick	1	1
wicks (for Hains 5th order lamp at Raspberry)	? yds	? yds
wicks for hand and table lamps/lanterns	3 doz	2
shades, table stand lamp	4	2
globes, hand lantern, white	6	4
service box	1	1
oil carrier, brass	1	1
floats, lamp	2	2
funnels, brass	4	3
measures, oil, graduated, 1 gallon	1	1
dripping pans	1	1
strainers, oil carrier, 1/2 gallon	4	4
filters, 3d order [5th order for Raspberry]	1	1
filter papers	128	55
lamp covers	2	2
lens covers	1	1
matches, in boxes	156	15
megaphone	1	0
MISCELLANEOUS		
wire, clock cord, galvanized	2 cords	1
clock oil, vials	6	2

Lantern

The top section of the light tower, known as the lantern, contained the lamp, the 5th-order Fresnel lens, and the clockwork apparatus that caused the lens to revolve at a precise speed. To reach the lantern, one climbed up wooden steps from the third level of the tower. Above a low, white-painted wainscot, eight plate glass windows allowed the light to shine in all directions. In the domed roof were four brass ventilators; at the apex of the roof was a ball-shaped smoke conductor and atop that, a lightning rod. The top of the lantern is 46 feet above the ground; the light itself was 77 feet above low water in Lake Superior (1951).⁷³ A door in the side of the lantern gave access to the railed platform outside.

Raspberry Island Light Station's 5th-order Fresnel lens, made in France, was installed in 1863 (fig. 28). The construction and operation of a Fresnel lens is thus described in Shanks and Shanks, *Lighthouses...on the Redwood Coast*:

[The Fresnel lens was composed of] hand-ground glass prisms and glass bull's eyes mounted in a gleaming brass framework....An oil lamp was placed inside the lens, using a glass chimney to carry smoke up to a ball-shaped opening on the lighthouse roof....To create a flashing effect the entire lens is placed on wheels or ball bearings which ran on a track at the base of the lens. A clockwork drive, powered by a weight, was used to rotate the lens. Several times a night, keepers would rewind the weight to keep the lens turning. Such flashing lenses had their prisms and bull's eyes arranged in panels. As the lens turned, light beams showed steadily from each panel, but to the mariner at sea the light appeared to be flashing. The effect was created because each time the panel lined up with a viewer, the viewer could see a flash of light, but in between the panels, the light appeared to go dark.⁷⁴

Raspberry's 5th-order lens was a relatively small one, typically used in harbor lights, with a height of about 20 inches and an inside diameter of 14 1/2 inches.⁷⁵ The lens was removed from the Raspberry Island tower about 1952 and was acquired by Leo Capser for display in his maritime museum on Madeline Island, now operated by the State Historical Society of Wisconsin.

73 F. R. Eldridge, "History of Raspberry Island Light Station, Wisconsin," a brief statement prepared in the U. S. Coast Guard Historical Section (U.S.L.H.S. clipping file on Raspberry Island, RG 26, National Archives, Washington, D.C.). On July 30, 1932, they "put new screens over ventilators in tower," and on August 16, 1932, they installed in the Raspberry lantern ventilators removed from Sand Island light.

74 Shanks and Shanks, op. cit., pp. 11-13.

75 Johnson, *The Modern Light-House Service* (Washington: GPO, 1890), pp. 50-56. A 1st-order lens, by contrast, was 12 feet high and 6 feet in diameter.

At Raspberry, the stationary lens rested on a steel pedestal (to be painted brown, according to *Instructions to Employees*, 1915) in the middle of the lantern floor. Flash panels, mounted on “chariot wheels,” rotated slowly around the lens, their speed carefully governed by a clockwork mechanism driven by a weight that descended in the “weight flue” below the service room almost to the floor of the tower’s first level before it had to be wound up again. Rewinding the weight by a hand crank was routinely done in the morning, after the light had been extinguished, and once during the night. On Outer Island, ex-Keeper Vernon Barningham recalled, the weight was wound up at midnight and ran until daybreak, with about five feet left before it stopped.⁷⁶

The keepers had to make sure that the timing of the clockwork apparatus was correct, since the period between flashes identified the lighthouse to ships on the lake. Raspberry’s “characteristic,” as it was called, was originally a flash every 90 seconds; the flash interval was changed in 1894 to 60 seconds. Allowing the lens to stop rotating was one of the worst things a keeper could do. It happened more than once at Raspberry Light, through human error, as previously mentioned (p. 12, above). The clock cord or cable also occasionally broke or slipped off its pulley, causing a temporary stoppage, as Keeper McLean noted in his journal in 1911:

At about 11 p.m. the keeper went in the tower to change lamps and wind the clock; in winding the clock the clock cable slipped off the pulley and while getting the cable in place the flash pans did not revolve for about 25 minutes.⁷⁷

From before 1910 to 1931, the lamp placed inside the lens was a “Hains 5th order 1 1/4 inch wick” kerosene lamp in which the light was produced by the burning wick rather than an incandescent mantle. Although incandescent oil vapor (IOV) lamps had been installed in some of the other island lights by the mid-1920s, it was not until September 1931 that Raspberry’s keeper could report that “new Aladdin lamps” had been installed in the tower. “There is a marked improvement in the light over the old type Hains lamps,”

76 Vernon Barningham, interview, n.d. By 1915

77 Raspberry Island, station journal, October 31, 1910. The clock cable was replaced in 1911 (October 25), 1919 (July 5), 1925 (August 29), and 1938 (July 7).

he noted, "increase in candle power about 300 per cent. A much whiter light and more of it." It is not clear if the Aladdin lamps (similar to today's Coleman lamps) were the same as IOV lamps in which the lamp was supplied with vaporized oil from a separate fuel tank under pressure from a hand-pumped air tank.⁷⁸

References in the station journal to maintenance work in the tower and lantern are quoted in Appendix H. It is clear from these that all the keepers spent a good portion of their time cleaning glass, polishing brass and steel, painting and washing paint, varnishing woodwork, and repairing equipment connected with the light.

The extremely cramped space in the lantern (figs. 18, 23) and the Light House Board's injunction against leaving anything in the room not actually necessary to operate the light meant that there was practically nothing in the lantern other than the light itself. Oil for the lamp was brought up from the oil room in the oil carrier, the night's supply of oil was put in a brass or "pargetized" can, and the empty oil carrier was returned immediately to the service room or oil room and thoroughly cleaned.⁷⁹

A set of lantern curtains was supplied to each light station, to be closed during daylight hours to protect the delicate apparatus from sun damage. In some of the larger lighthouses the curtains hung from brass wire; when open,

78 Ibid., September 19, 1931; Vernon Barningham, interview, n.d.; Walter Parker, interview, 1985. It was Barningham who, as 1st assistant at Raspberry station, installed the new lamps; "the reason I was transferred," he said, "was because I was changing the lights." For his explanation of what was involved in light maintenance in the 1930s, see Appendix G; much of this applies directly to Raspberry Island, where he was stationed from 1930 to 1937, and some to Outer Island, where he served from 1937 to 1948. IOV lamps were installed at LaPointe, Chequamegon Point, Outer Island, and Devils Island lights in 1913-14 and an electric light at Michigan Island in 1929; apparently Raspberry Island was the last station to switch from the earlier type of kerosene wick lamp.

79 *Instructions to Light-Keepers....*, 1902, p. 11.

they were gathered at one side of the lantern and tied. A 1901 drawing in the National Archives indicates that in smaller (4th-6th order) lanterns, the Irish linen curtains were mounted on tin spring rollers, to operate like window blinds; the curtains were to be 3'6 25/32" long, and the rollers, 23.07" long. At the bottom of each curtain, two metal "curtain rings," 1-1/2" in diameter, served for raising and lowering the curtain and, probably, to anchor it down. There was also supposed to be a cloth (presumably linen) cover for the lens and one for the lamp.⁸⁰

A 1931 reference to cleaning the lens, washing the "deck," and putting carpet down may mean that there was a canvas rug or carpet on the floor of the lantern; several earlier (1925-29) references to canvas rugs simply place them "in tower" (see p. 62). In 1925, "for the purpose of stopping leaks," they hung painted canvas over the exterior wainscoting "outside the tower lantern room" and on the new "lantern door."⁸¹

Fog Signal Building

In response to pressure from Wisconsin and Minnesota shippers and ship masters, the Light House Board in 1902 authorized installation of a duplicate steam fog signal at Raspberry Island Light Station, where fog and snow and smoke from forest fires reduced visibility to a dangerous degree often enough to affect traffic to and from Bayfield and Ashland. District Engineer Lansing H. Beach summarized the arguments in favor of this in a letter to the board, January 29, 1902:

The amount of shipping making use of the passage between Raspberry Island and the mainland of Wisconsin on Lake Superior is very considerable at the present time, and constantly increasing, and in our opinion the establish-

80 Raspberry Island's curtains are closed in figure 28a . In 1887 Point Loma Light Station requisitioned 100 feet of brass wire for lantern curtains (National Park Service, "Furnishing Plan, Point Loma Lighthouse, Cabrillo National Monument, California," by Katherine B. Menz, Harpers Ferry Center, review draft, 1978, p. 46). For a photograph of Point Reyes Light with its curtains gathered to one place and tied in the middle, see Shanks and Shanks, *Lighthouses...Redwood Coast*, p. 17. For drawings and specifications for lantern curtains and curtain rings, see "Lantern for Apparatus of the 4th, 5th, and 6th Orders," a set of construction drawings issued by the Light House Board, March 1898, file 282, Light House Board Contracts, box 23, RG 26, National Archives, Washington (copy at Harpers Ferry Center). A lens cover is shown in a photograph of Hecate Head Light, Oregon (26-LG-71-85, Photographic Division, National Archives, Washington).

81 Raspberry Island, station journal, August 11 and 20, September 14, 1925.

ment of a fog-signal in connection with the light on Raspberry Island, Wisconsin, would be of great assistance to navigation in these waters; and that the commercial interests are sufficient at the present time to justify the establishment of such a signal.⁸²

Introduced in the 1850s, the steam whistle fog signal plant typically consisted of a locomotive-type boiler, a stationary steam engine, and a brass locomotive whistle anywhere from 6 to 18 inches in diameter; in most cases these plants were installed in duplicate, so that there was a back-up in case one failed. Although by 1902 the Light House Board was pushing the installation of more efficient oil-burning engines and air compressors in place of the "old-style coal burning engines to produce steam to be used in whistles and sirens," the steam system was still cheaper to install and for that reason was chosen for Raspberry Island's fog signal. It had the additional advantage of fairly simple maintenance, the engine requiring, it was said, "no more skilled attention than does an ordinary stationary engine." The chief disadvantages were the large quantities of coal required to fuel the boilers and the length of time (one-half to three-quarters of an hour) it took to get up enough steam to sound the whistle, a possibly costly delay when fog rolled in suddenly.⁸³

Installation of the fog signal on Raspberry Island involved construction of a brick building to house the signal plant and a hoisting engine, as well as "a place for landing the materials, and a tramway to convey them to the top of the bluff," a distance of about 100 feet. A small, brick "oil room," authorized in 1901, was built at the same time.⁸⁴

The estimate for all the work came to \$6,000, broken down as follows:⁸⁵

Material

50 M brick, at \$7	350.00
Lime, cement, sewer crock, etc.	115.00
Cut stone	30.00
10 M ft. B.M. lumber, \$30	300.00

82 See Light House Board Correspondence, file 3655, RG 26, National Archives, Washington, DC.

83 Light House Board, *Annual Report of the Light House Board, 1902* (Washington: GPO, 1902), p.37; Light House Board Correspondence, file 3655, RG 26, National Archives, Washington, DC.; Johnson, *The Modern Light-House Service* (1890), pp. 69-70; Rathbun, "Light Stations," p. 54.

84 Light House Board to 11th District Engineer Beach, February 27, 1901 (Letters to Engineers, 11th District, 1902-03, RG 26, National Archives); Engineer Beach to Light House Board, March 14, 1902 (Light House Board Correspondence, RG 26, NA); Light House Service clipping file, Raspberry Island (RG 26, NA).

85 Undated estimate, file 3655, Light House Board Correspondence, RG 26, NA.

Factory work	75.00
Hardware & ironwork	75.00
Corrugated & smooth iron	200.00
Paints	30.00
Boilers & machinery	2400.00
Boiler covering	75.00
Hoisting engine, tramway & car	500.00
	<u>4150.00</u>
<u>Service</u> [not transcribed]	1850.00
<u>Total</u>	<u>6000.00</u>

The “boiler & machinery” contract went to the Sheboygan, Wisconsin, firm of Optenberg & Sonneman, low bidders at \$2,807.00, including delivery. Each boiler was to be 78 inches long and 57 inches in diameter, the “shell” constructed of 3/8-inch and the “drum shell” [steam drum] of 1/4-inch marine steel, supplied by Illinois Steel Company, Chicago. In spite of a 100-day delay in fulfilling the contract, the board authorized payment in full on March 5, 1903.⁸⁶

A Light House Service working party meanwhile had constructed the necessary dock and tramway at Raspberry Island. On June 5, 1903, Keeper Hendrickson noted in the station journal: “Landed the boilers and got them up the bank.” Five days later the construction crew laid the foundation of the “fog signal house”; on July 29 they “finished chimney”; and on August 19, “Mr. Miller [the district machinist] finished the pipefitting.”

With unusual formality, the keeper recorded the first test of the signal on August 29: “The 10 in. steam whistle at this station have [sic] today for the first time been sending its sound over Lake Superior.” The final test of the two boilers and timing of the signal took place on September 3, 1903, more or less as promised in “Notice to Mariners, No. 83 of 1903, Washington, D.C., August 21, 1903”:

RASPBERRY ISLAND LIGHT-STATION

Located on the southwesterly point of Raspberry Island, one of the Apostle Islands, southwesterly part of Lake Superior, Wisconsin.

Notice is hereby given, that on or about September 1, 1903, a 10-inch steam whistle will be established at this station to sound, during thick or foggy

⁸⁶ Light House Board Correspondence, file 3655: May 22 and July 12, 1902; Light House Board, Letters to Engineers, 11th District: May 7, 1902-March 5, 1903 (RG 26, NA).

weather, blasts of 3 seconds' duration, separated by silent intervals of 17 seconds.

Blast	Silent interval	Blast	Silent interval
3 sec.	17 sec.	3 sec.	17 sec.

The fog signal building [figs. 2, 3] is a red brick structure, with red roof, located about 75 feet southeasterly of the light-tower.⁸⁷

"The plant consists of one right-hand and one left-hand boiler and engine," stated the 1904 annual report of the Light House Service.⁸⁸ Although there are no interior photographs showing the boilers and engines at Raspberry Island station, there exists a set of construction drawings and specifications for "Steam Fog Signals for 9th and 11th L.H. Districts," dated January 28, 1896, which almost certainly were used in manufacturing the Raspberry Island steam plant.⁸⁹ There is also a 1925 drawing of the Raspberry Island fog signal building, prepared in the office of Superintendent of Lighthouses, 11th District, which includes a floor plan and an elevation (figs. 30,31) that show the location and general configuration of the duplicate steam plant.

No. 1 boiler and engine sat on concrete pads on the south side of the building, and No. 2 boiler and engine on the north side, about 11 feet in from the west door. Above each boiler was a "steam chest" or steam drum, from which a pipe led up through the roof to the steam whistle. The stovepipes from the

87 File, 3655, Light House Board Correspondence, 1901-10, RG 26, NA.

88 Light House Service clipping file: Raspberry Island, RG 26, NA.

89 Contract 2759, April 6, 1903, Light House Board contracts, box 24, RG 26, National Archives, Washington, D.C. This contract for steam boilers at St. Martin's Island Light Station, Michigan, was awarded to Optenberg & Sonneman, Cheboygan, Michigan, who had produced Raspberry Island's boilers and engines a few months earlier. Since the boilers were the same size, the same drawings and specifications presumably were used in both contracts. The drawings and specifications are reproduced in Appendix L of this report.

two boilers joined into a single pipe leading to the flue opening in the central chimney, about six feet east of the boilers. Run-off from the steam chests drained down into 4" sewer crocks under the floor.⁹⁰

Water for the boilers was stored in a supply tank, which was filled from the cistern just outside the building on the south side, usually by a steam-powered syphon pump, although on occasion a hand-pump had to be used (see fig. 33). The supply tank does not appear on the 1925 floor plan or elevation, but it was attached to the south wall, probably just west of the south window. Its pulling away from the wall "about 2 inches" in 1924 was an early symptom of the wall failure that prompted the 1925 fog signal repairs.⁹¹

Other fixtures in the west end of the fog signal before 1932 included a sink [drain?] in the middle of the floor in front of the two boilers (fig. 30) and a heating stove that Keeper Hendrickson "put in...fog signal to keep the water from freezing" in the supply tank and boilers.⁹²

The 1925 floor plan (fig. 30) shows the east end of the building empty except for a space directly behind the chimney, 3 feet wide and 1 foot deep, identified as a "coal bunker." The station journals show that signal coal and wood were stored in various places, including the signal building, over the years:

"cut wood for the fog signal and piled in to the house" (June 3, 1903)

"wheeled [8 tons of anthracite] coal from the fog signal to the ware house and put it in a bin there"; (September 18, 1913)

"split signal wood and piled it in the house for fall use" (September 26, 1913)

90 Drawing 10911, "Raspberry Island Light Station Wis./Fog Signal Building Repairs," approved October 15, 1925 (APIS collection).

91 Raspberry Island, station journal, May 17, 1907: "got up steam and was filling tank and cistern" [from the lake]; October 17, 1907: "got up steam in signal to pump water for house cisterns"; June 13, 1910: "pumped the water tank in fog signal with hand pump" [probably the force pump on the cistern; see figure 34]; April 26, 1924: "water tank in signal...has given way from the wall about two inches"; November 7, 1925: "Fitted new pieces 1 1/4" & 1" in water and steam lines to siphone [sic] system, owing to a steel plate being put on wall of fog signal where these connections came through." The cistern and boxed line leading into the south wall of the building are visible in two pre-1932 photographs (figs. 6, 31); the 18' long steel plate along the watercourse is still in place (fig. 32).

92 Raspberry Island, station journal, November 7 and 18, 1903. The second reference: "water pipes frozen in signal house" suggests either that the stove was inadequate to the job or had not been fired up when needed.

references to “coal bunker” and old and new “coal house,” with no locations indicated (various dates: 1915-18)

“wheeled in coal from outside and placed it in the bunkers” (May 21, 1926)

“finished painting...coal shed” (May 28, 1926)

“wheeled in [15 tons bituminous] coal from pile outside the building” (October 19, 1926)

“transferred coal from yard to bin inside” (October 29, 1926)

“cleaned up yard back of fog signal building” (November 6, 1926)

hoisting coal and “putting it in signal” (June 30, 1929)

“wrecking old coal house at east end of signal, making coal bin in wood shed” (August 13, 1929)

“wheeling hard coal in signal” (September 17, 1929)⁹³

From the above it would appear that at least some of the wood and coal used to fire the fog signal boilers was placed in the east end of the building, the coal in a small bin or bunker behind the chimney. Coal was delivered in 50-pound sacks and probably stored that way until a working supply was dumped in the bunker, ready for use in the boilers. Wood, some gathered on the beach, some cut in the woods, was used to start fires; the supply in the signal house was probably not very large and would have been piled somewhere at the east end. Since getting up steam fast was important, some keepers took shortcuts, as Ben Hudak of Long Island explained:

[They burned coal] or wood if we had it ready. If a fog started coming in we had a half hour to get up steam. They gave us that much time. All you had to do is throw a little kerosene in and some shavings and away she'd go.⁹⁴

93 Raspberry Island, station journal, dates cited in text. The Light House Board authorized building of a woodshed at Raspberry Island Light Station on January 23, 1904 (Letters to Engineers, 11th District, RG 26, NA).

94 Ben Hudak, interviewed by Marjorie F. Benton, n.d.

During its first full season, the fog signal at Raspberry Island station was “in operation some 49 hours and consumed about 5 tons of coal”; in contrast, Devils Island’s 10-inch steam whistle sounded some 278 hours and used about 17 tons, while the signal at Two Harbors, Minnesota, was in operation some 506 hours and used up about 20 tons of coal.⁹⁵ Coal deliveries noted in the journals included 8 tons in 1906, 25 tons in 1910, 8 tons in 1913, 15 tons in 1925 and 1926.⁹⁶

The twin 10-inch brass steam whistles, raised high enough to clear the peak of the roof (fig. 3), were braced and linked by a wooden plank (possibly two), which, along with the roof ladder, made it possible for the keepers to get to the whistles to polish them.⁹⁷ The whistle’s sound was memorably loud at close range, as one of Keeper Benton’s visitors recalled, although she mistakenly remembered it as a horn:

The fog horn was in operation then. We had a couple of fogs while we were there and, oh, that horn, blaring away all night long. After a while you got accustomed to it and didn’t even hear it, but it was terrible...and we were on the side closest to it.

Other objects and fixtures that were identified with the fog signal building before the steam plant was replaced in 1932 included the following:

“a closet in the fog signal for paint buckets” (September 14, 1903)

“painted the spar buoy and ladders in signal house” (May 10, 1906)

“making new ladder for signal roof” (November 24, 1915)

“made canvas cover for fog signal engine” (October 15, 1925)

“replacing cupboard and equipment in fog signal” and “carried tools and other equipment to the fog signal building and put them in there [sic] place” after repairs to the building (November 12-13, 1925)

95 Light House Board, *Annual Report...1904*, p. 272. All references to starting the fire or sounding the fog signal in 1920-22 are listed in Appendix J, along with extracts relating to work in the fog signal building 1903-39.

96 Raspberry Island, station journal, August 27, 1906; September 13, 1910; September 17, 1913; July 20, 1925; August 23, 1926.

97 Raspberry Island, station journal, October 13, 1910: “polished signal whistle”; November 24, 1915: “making new ladder for signal roof”; August 12, 1924: “put new plank on signal roof for whistles”; June 12, 1926: “dressing and painting 2 plank for fog signal.”

98 Evelyn Lutz Durocher, interview, 1980. Benton’s journal notes two uses of the signal, for rain and fog, during the probable dates of her two visits in July and August 1922 (station journal, July 23 and August 1, 1922). Appendix K includes detailed instructions on the operation of the steam fog signal.

“painting boilers and pipes, tool cupboards” (June 7, 1926)

“repaired soot apron for fog signal, fixed canvas cover for engine” (July 2, 1926)

“polished lamps in fog signal” (September 12, 1927)

“9 grate bars, 5 ft. long, Fog Signal furnace on hand, 112 boiler flues—tubes” (July 20, 1928, written inside cover of journal)

“oiled surplus boiler tubes to prevent rusting” (November 23, 1928)

“painted signal chaires [sic] and stepladder” (June 8, 1929)

“made new steps for ladder in signal bldg” (September 10, 1930)

“made new canvas apron for cleaning tubes in boiler” (September 19, 1930)

“painted chairs & ladder for signal” (July 9, 1931)

“painted locker in signal” (May 5, 1933)

“started to refinish top of work bench for signal” and “fixed work bench” (June 20 and 22, 1933)

“cleaning in fog signal and put tools in place after painting” (June 5, 1935)⁹⁹

In 1932, the Light House Service replaced Raspberry Island’s antiquated steam fog signal system with an air diaphone plant operating on compressed air. The lighthouse tender *Amaranth* began unloading the new equipment on May 12 and delivered tools and other supplies for installing it in late July, but it was late September before the construction crew arrived. Besides removal of the steam boilers and engines and installing the new diaphone equipment, the job involved construction of a dormer on the south side of the

⁹⁹ Raspberry Island, station journal, dates cited in text. The locker/cupboard and work table may be the ones now in the southeast corner of the building (fig. 39).

roof and a platform inside to house part of the apparatus; the diaphone horns were mounted on the east and west faces of the dormer.

Finally, on November 24, 1932, the keeper “started one of the new fog signal engines for the first time.” In celebration, he noted in the station journal, “a very elaborate dinner was served by [1st Assistant] & Mrs. Barningham for all keepers & construction crew.”¹⁰⁰

Introduced from Canada in 1915, the air diaphone, “operating with a reciprocating piston” rather than the rotor used with a siren, employed an air compressor driven by an internal-combustion engine.¹⁰¹ Raspberry Island’s two 25 HP “semi-diesel engines” powered twin air compressors that supplied air to the diaphone horns on the roof of the building. A “Curtis compressor” repaired in 1937 may have been the “new starting compressor” installed in 1933.¹⁰²

The new installation included “all necessary facilities for the storing of distillate oil,” the commissioner of lighthouses reported. This was presumably the 1805 gallon fuel tank, shown in figures 34-35 along the north wall, west end. “A rack for oil barrels” was built in the signal building in 1933.¹⁰³

When they replaced the other steam engines, according to Walter Parker, a member of the construction crew, “they left in that old steam winch,” because

100 Raspberry Island, station journal, May 12-November 26, 1932; see Appendix J. The dormer and part of one diaphone horn are visible in a 1945 photograph (fig. 32). The horns were taken away by Coast Guard personnel sometime between 1963 and 1975 (Mel and Joyce Erickson, interview, 1982). One of Devils Island’s diaphone horns is in the APIS museum collection (APIS 2062). Outer Island’s diaphone plant, including its twin horns, is still in place.

101 Putnam, *Lighthouses...of the United States*, p. 230.

102 *Bayfield County Press*, May 19, 1932; Raspberry Island, station journal, May 2-4, 1933, and September 24, 1937. The working drawings (fig. 34) call for “1 cyl. 10 1/2 x 12 oil engine & 8 x 6 Gardner Denver aid compressor, Venn-Severin Machine Co.” The *Press* article called the latter “Van Servein” air compressors.

103 Raspberry Island, station journal, July 27, 1933: “built rack for oil barrels in signal”; “Report of the Light House Service,” in *21st Annual Report of the Secretary of Commerce 1933* (Washington: GPO, 1933), p. 104.

it “adapts readily to air.” This was the tramway hoisting engine, which was and still is housed in the hoisting engine house attached to the east end of the fog signal building.¹⁰⁴

They did replace a “23-kilowatt diesel-driven generator” installed in 1928, presumably to power the radio set installed on Raspberry in 1927. The new generator did not, however, provide electricity for use “in the house,” as stated by Rathbun, nor in the tower or fog signal building. For this Raspberry Island had to wait until 1941.¹⁰⁵

The engines and compressors for the new diaphone fog signal occupied approximately the same space previously occupied by the steam boilers and engines, in the western half of the building.¹⁰⁶ Just south of the chimney a metal ladder provided access to the platform which held the diaphone apparatus; the railing around this “diaphone platform” was put up in 1937.¹⁰⁷

New equipment generated some new fixtures, some of which probably went into the east end of the room, where coal and wood no longer had to be stored:

installing “new starting compressor” (May 2-4, 1933)

“built gasket locker” and “put all gaskets in locker and hung up tools” (May 6 and 8, 1933)

“building locker for fittings in signal” (June 16, 1933)

building and hanging screen doors for fog signal (July 11 and August 22, 1933); one of these is visible in the 1945 photograph (fig. 39)

“built rack for oil barrels in signal” (July 27, 1933)

“built rack for ladder jacks” (August 2, 1933)

“hung Aladdin lamp in signal” (October 7, 1933)

104 Walter Parker, interviewed by Kate Lidfors, APIS, 1982.

105 Rathbun, “Light Stations,” p. 71, citing articles in the *Bayfield Press*. There is no mention of a generator or anything electrical in the station journals through 1939 and “electrification 4-41” was noted as revision No. 2 on the 1932 fog signal construction drawings (figs. 33-34). Another fixture that may have been removed at this time was the outside pump on the waterline leading from the cistern to the fog signal. The pump is visible in a ca.1922 photograph but not in one taken in 1945.

106 While the Ellerbee Company rented Raspberry for its employees use, after 1947, they had a pingpong table at the east end, “where the generators used to be” (Mel and Joyce Erickson, interview, 1982).

107 Raspberry Island, station journal, October 6, 1937. The platform and stairs are still in place; the rest of the diaphone plant is gone.

The next change in equipment in the fog signal building appears to have been the installation in 1939 of a radiophone for communication between Raspberry Island and Ashland Breakwater light stations. The assistant superintendent, 11th district, thus described the proposed installation in a memorandum to the commissioner of lighthouses:

It is proposed to install a wooden mast with wire running up to the top, antenna to be approximately 45 feet long; the antenna installation to be practically a duplicate of the installation at Ashland Breakwater Light Station. The equipment will be located in the fog signal building....

As regards power plant supply for this station, there is a surplus of Kohler plants being removed from various stations where power plant improvements are being made, and it is intended to transfer one of these Kohlers, 110 volt, 1 1/2 kw generating plant, to this station to furnish power for the radiophone transmitter. This will also furnish power for charging the 6-volt battery which will be used to operate the LSR 117 receiver....

[Estimate attached to the above, totalling \$800.00, called for the following:]

- 1 LSR 320D radiophone transmitter
- 1 LSR 803 rotary converter
- 1 LSR 670 unit
- 1 set of tubes
- 1 LSR 206 crystal and holder
- 2 LSR 117 receivers and 6-volt battery, also charger antenna, mast, etc.
- labor, miscellaneous materials, travel, contingencies

Deputy Commissioner C.A. Park approved the proposal on March 21, 1939, and assigned Raspberry Island the call letters WWXJ. The radio equipment's location in the building is shown on the revised 1932 drawings (figs. 34-35).¹⁰⁸

A major change in April 1941 was the introduction of a full-scale electrical plant, which included wiring and electric lights in the tower and keepers' quarters and in the fog signal.¹⁰⁹ The new equipment, some of which has survived in place, was set up in the east end of the fog signal building. It included a "Kohler electric plant [two generators], Type 2 RVI, -2KW, 125V, DC on concrete base 27 3/4" x 20 3/8" x 12" (high)." The 1944 Kohler generator

108 Assistant Superintendent, 11th District, to Commissioner of Lighthouses, March 13, 1939, and Deputy Commissioner's reply, March 21, 1939, in file 2749B, Light House Board Correspondence, 1911-39, RG 26, NA.

109 The evidence for the 1941 date consists of the 1932 drawings, revision 2: "Electrification 4-41" (figs. 33-36); batteries, dated 4-25-41, now in the building; and a set of drawings, based on the original 1905 drawings for the main station building but showing "lighting & wiring added 1941" (figs. 20-23). No evidence has been found to confirm Walter Parker's statement, cited in Rathbun, "Light Stations," p. 71, that electricity was introduced in connection with the 1932 air diaphone installation.

now there is a replacement (fig. 43). It has a plate with the following information:

No. 97290
R.W.2 K.V.A.
Volts 115 D.C.
Amp. per term 17.4
Phase [blank] Cycles [blank]
R.P.M. 1400 H.P. [blank]
Bat. volts 110

This generator is on the south side of the building, a little east of the door. Directly behind the chimney is a tall wood panel (fig. 40) on which are mounted various gauges and switches related to the electrical system. A label identifies this as a product of Laganke Electric Company, Cleveland, Ohio. The other surviving component of the 1941 electric plant is a battery bank on the east wall, northeast corner, consisting of 54 Exide batteries in three double rows of 18 batteries each on metal shelving painted gray (fig. 41). On several of these identical batteries are labels with the following information:

Type EM-11
72 hr CAP. 290 amp hrs
8 hr CAP. 200 amp hrs
Date 4 25 41

From the ceiling hang several electric light fixtures with enameled metal shades, white inside and dark green outside (fig. 41). These fixtures could also date from 1941. A workbench and wall-mounted cupboard or closet on the east wall, southeast corner, both painted gray or lead color, may be those mentioned as early as 1903 (closet for paint buckets), 1925 (cupboard), and 1933 (workbench) (fig. 42).¹¹⁰

In 1947 the fog signal was changed to an automated CO-2 bell with a clapper, striking once every 15 seconds. The Coast Guard discontinued the Raspberry Island fog signal in 1952 and subsequently removed the generators, air compressors, and diaphone horns. Where the generators once stood, a pingpong table provided indoor recreation for the employees of Ellerbee Company during the 1960s and early 1970s.¹¹¹

110 Another, more recent generator, standing next to the old Kohler, was put in by the National Park Service, along with the modern fuse box and an unpainted work table.

111 Rathbun, "Light Houses," pp. 80, 122-123; Eldridge, "History of Raspberry Island Light Station"; Mel and Joyce Erickson, interview, 1982.

Paint Colors, Interior and Exterior

Painting and cleaning in and around the fog signal building consumed as much of the keepers' time as light tower maintenance.¹¹² Except for the exterior brick and the brass and "bright steel work" on some of the fog signal apparatus, everything was painted—boilers and engines, water and steam pipes, stove pipes, floor, walls, ceiling, corrugated iron roof, doors, shutters, inside and outside trim. Regulations authorized black or "brown, metallic" paint for interior ironwork; white for interior woodwork (except hardwood); lead color for floors (except hardwood) and walls; red, green, or brown for outside shutters; red or lead color for outside trim. Specific journal references to colors used in the fog signal on Raspberry Island up to 1939 follow:

"cleaned and blackened boilers and connecting pipes" (May 1, 1906)

"painted red part of walls in signal" (May 30, 1911)

"painted the red walls in fog signal house" (June 3, 1912)

"scrubbing the red paint of [off?] the wall inside the signal" and "painting walls in signal" (September 21-22, 1914)

"painting fog signal roof" and "finished with the red paint to-day" (May 5-6, 1916)

"finished painting boilers with red lead" (September 26, 1929)

"red leaded" air and fuel tanks in signal and siphon pump in boat house "& got it [pump] ready to enamel" (July 21, 27, 30, August 8, 9, 15, 16, 1932)

"scrubbing in fog signal and painting [doors and] window frames white" (June 15-18, 1934)

"mixed cream paint for in side of signal wall and ceiling"; "painted ceiling in fog signal cream"; "painted signal walls cream" (May 29-31, 1935)

"painting lead color paint in fog signal"; "finished painting lead color walls and tank" (June 5-6, 1935)

"finished cream in signal"; "finished painting gray in signal" (May 12, 18, 1938)

"painting black trim on engines in fog signal" (May 15, 1939)¹¹³

112 References to these activities from 1903 through 1939 are included in Appendix J.

113 Raspberry Island, station journals, dates cited in text. Paint analysis in the fog signal is needed to establish sequence of colors on walls, ceiling, and trim.

From this scanty information it appears that the lower part of the walls was painted red until 1914 and possibly later, but was painted gray by 1935. At present the interior walls of the fog signal are dark gray to a height of about 5'5" and cream or beige above; the concrete floor is gray or lead color and so are the closet or cupboard and the work table in the southeast corner of the building. All woodwork, inside and out, is painted white, except for the green screen doors and shutters. The boilers, engines, tanks, and piping appear to have been painted black, possibly over a red lead undercoat; steel ("bright work") fittings were polished and oiled; brass was polished.

FURNISHING PLAN

INTERPRETIVE OBJECTIVES

One of the interpretive objectives for Apostle Islands National Lakeshore, as stated in the "Interpretive Prospectus" (1979), is "to explain the significance of the natural, cultural, recreational, and historical aspects of the area as they have related to and continue to relate to human use." Another is to provide interpretive programs "complementary to other local interpretive efforts," such as those of the Buffalo Art Center, the Madeline Island Historical Museum operated by the State Historical Society of Wisconsin, and the Bayfield Heritage Association.

Lighthouses are among the most visible and significant reminders of the early days of shipping on the Great Lakes. All six of the lightstations are located within the National Lakeshore. None is now a manned station, so they stand only as silent witnesses to past ways of technology and life.

In the old Light House Service and its dedicated employees played a very important part in making it relatively safe for shipping to ply the waters of Lake Superior in the 19th and early 20th century. It is therefore appropriate for the National Park Service to use one of the old light stations in its care to interpret the historical role of the lighthouse keepers, the technology at their command, and the distinctive way of life they and their families enjoyed on the islands.

After surveying all of the surviving light stations of the Apostle Islands, it was decided that Raspberry Island Light Station was most suitable for the purpose, partly because it is the most accessible to visitors, partly because it has survived more nearly intact than the others, and partly because of the good information from the Benton family concerning the proposed period of interpretation. All of the buildings in the Raspberry complex date from between 1902 and 1930, and many of the original furnishings from the 1914-1924 period are in the Apostle Islands National Lakeshore museum collection.

The principal objective in refurnishing the keeper's quarters and the fog signal building, as proposed in the "Interpretive Prospectus," is to help visitors visualize and understand how a light station functioned in the days before radio and other electronic aids to navigation and how the keepers and their families coped in their relative isolation from the mainland. To this end it is proposed that the equipment in the light tower and the fog signal building be restored as nearly as possible to its appearance in the early 1930s, when the 5th-order light operated with kerosene and a clockwork revolving

mechanism and the fog signal was a compressed air diaphone horn. Retention of certain later equipment (Kohler generator and Exide battery bank) will help visitors understand how technology changed in the 1930s and 1940s, shortly before automation brought to an end the era of manned light-houses.

Partial restoration and refurnishing of the principal keeper's quarters will give dimension to the lives of the keeper and his family on one of the Apostle Islands, so different from the popular conception of the lighthouse keeper's lonely life on an inaccessible rock surrounded by pounding surf. Other elements of the history of navigational aids on the Great Lakes are featured in the exhibits and publications available to visitors on shore in Bayfield at the National Lakeshore visitor center and the Bayfield Heritage Association's museum and in the state historical society's museum on Madeline Island. A visit to Raspberry Island will supplement these interpretive presentations very effectively by providing an on-site experience which focusses sharply on a particular family at a particular time and place in the Apostle Islands story.

OPERATING PLAN

Historically, Raspberry Island Light Station operated from the time the lake ice broke up in late April or early May until the lake froze up again in early December. Today, weather still determines the island's accessibility by boat, although the snowmobile now makes visits feasible at times in the dead of winter.

Apostle Islands National Lakeshore plans to open the buildings on Raspberry Island to daily visitation from May to November. Visitors will reach the island by commercial tour boat or by privately owned vessels of various kinds, from yachts to kayaks. After docking they will climb the steep flight of steps to the top of the bluff; access for the handicapped should be provided, possibly by adapting the existing tramway to serve as a chair hoist. Once on the station grounds, visitors will be free to walk around on their own, viewing the out-buildings, which will be identified on a general site orientation panel and, perhaps, on a site brochure. Visitors may also walk on the trail to the interior of the island. Interpretive personnel will be on hand to provide general information and answer questions.

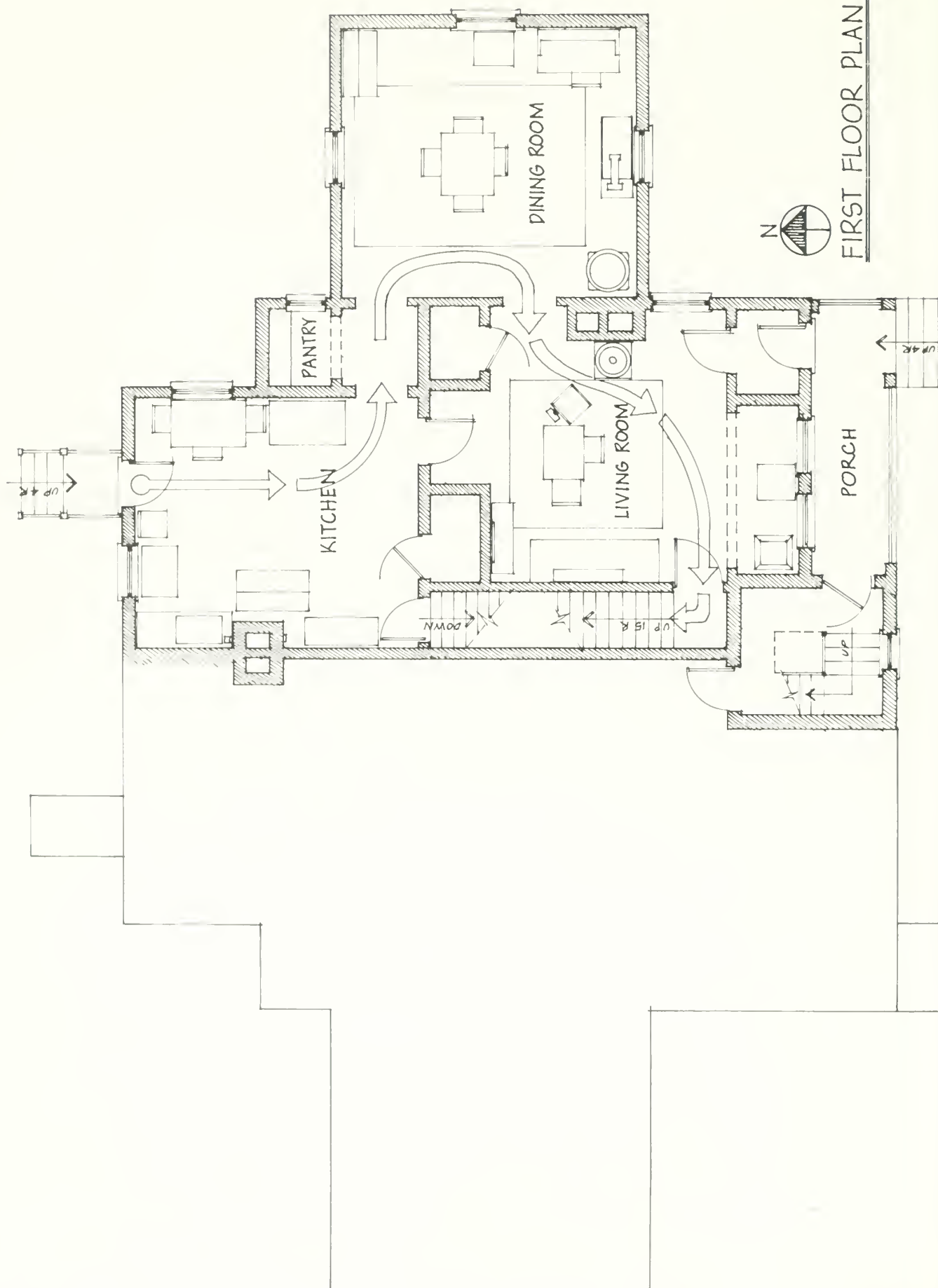
Visitors will be able to walk through the fog signal building, entering through the west door and exiting through the north door by the oil house. An interpreter in the fog signal building will explain how the steam fog signals worked and the changes that occurred with the introduction of more up-to-date equipment in the 1930s and 1940s.

Tours of the keeper's quarters and light tower will be on a conducted basis only. Because of the cramped quarters, particularly in the tower, tour groups will be limited to about 12-15 people at a time in the dwelling, 5 in the tower. The tour will include the tower and lantern, and Keeper Benton's quarters: living room, dining room, pantry, kitchen, and two of the three bedrooms upstairs (Mr. and Mrs. Benton's room and Harold's room). The back bedroom, used by guests of the Bentons, will not be furnished and could be used for an exhibit on the Bentons and other residents of Raspberry Island.

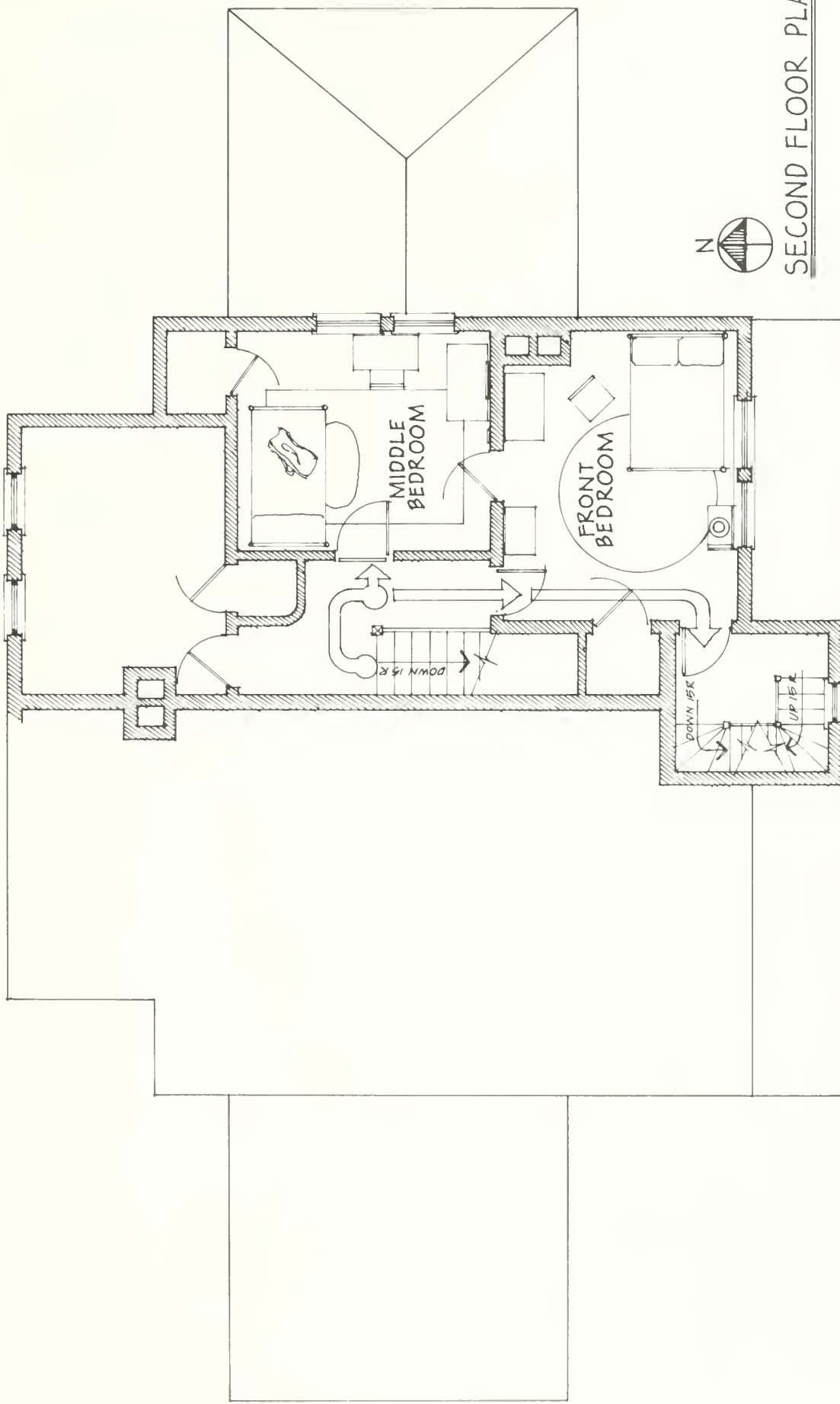
Since visitors will go through in small groups, accompanied by a uniformed National Park Service employee, no room barriers will be needed except across the middle bedroom doorway. Modern runners will define the visitor path through each room and protect floors and floor coverings.

The order followed in this section is based on the assumption that parties touring the keeper's quarters will not exceed 15 people and that they will normally enter the building through the back door and exit through the tower door to the front porch. When a group of more than 15 has to be split, one group will follow this procedure, while the second group will visit the tower and lantern first (five at a time), then begin their house visit at the kitchen door or, in inclement weather, at the front door. When large groups appear, it may be necessary to limit the dwelling tour to the first floor, with staff on fixed point duty in the kitchen and living room to control visitor flow and provide interpretation, control visitor flow, and protect exhibited objects.

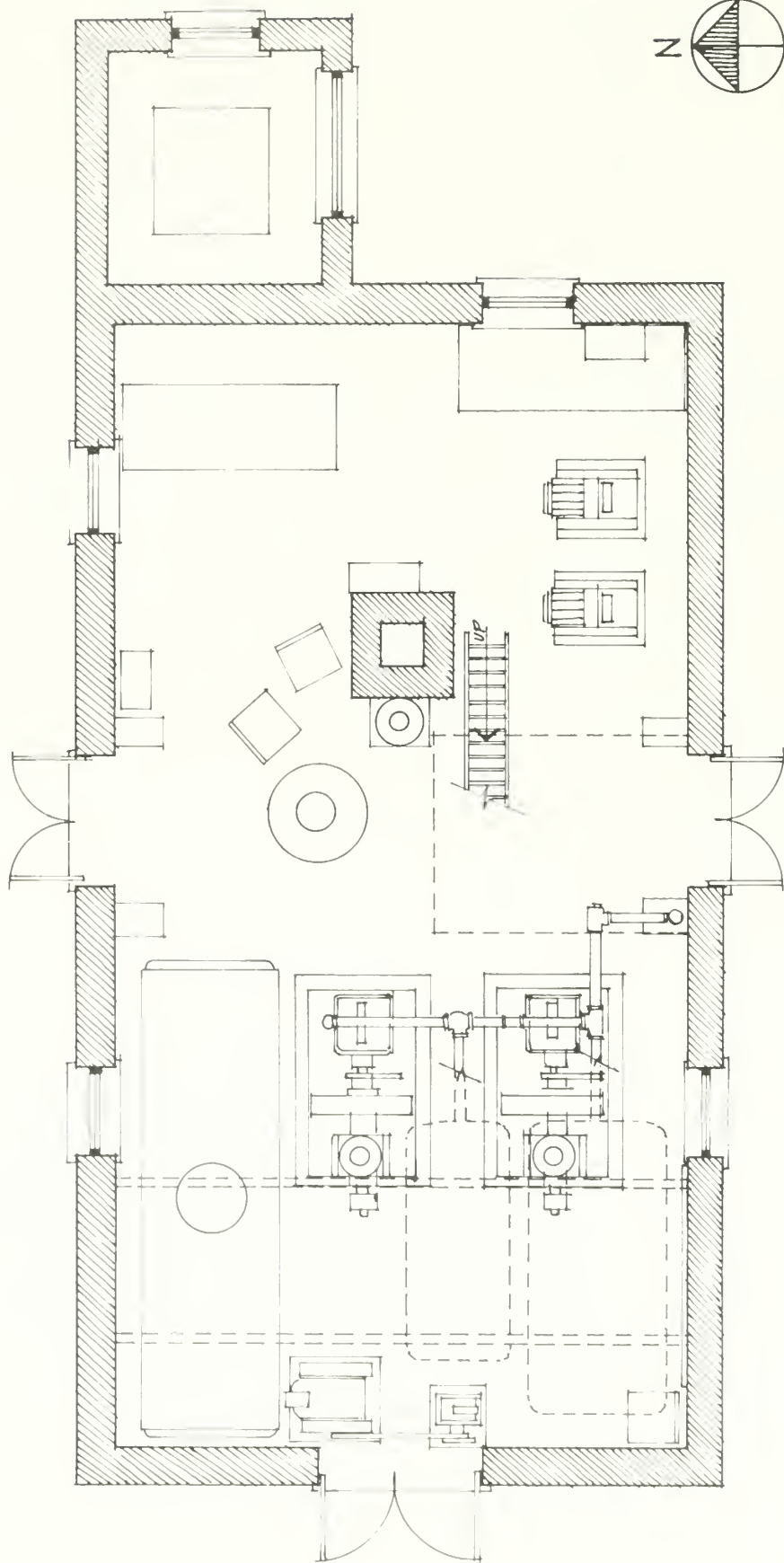
Because of its isolation, Raspberry Island poses special security problems, particularly the threat of vandalism and theft. To minimize the likelihood of unlawful entry, National Park Service employees will be quartered on the island during the active season; they will occupy the assistant keepers' quarters on the west side of the station building. When the station is closed in the late fall, furnishings vulnerable to extreme cold and dampness (chiefly organic materials) will be moved to a mainland storage facility. While closed, the buildings on the island will be protected by an intrusion detection system to which the Ranger staff can respond within 30 minutes.



FIRST FLOOR PLAN



SECOND FLOOR PLAN



PLAN of FOG-SIGNAL BUILDING

RECOMMENDED FURNISHINGS

The following plan incorporates all of the larger artifacts and many of the smaller objects associated with the Bentons in the Apostle Islands National Lakeshore collection. On the basis of evidence from Raspberry and other Apostle Islands sites, acquisition of other period pieces is recommended to place the Benton pieces in a meaningful setting.

Sears, Roebuck and Montgomery Ward catalogs of the 1902-15 period have been drawn on for prototypes of many recommended items, as being representative of the kinds of goods the Bentons could have acquired either by mail order or at stores in the Bayfield area. At least one of their co-workers—Harry Thompson, 1st assistant at Split Rock—dealt with Sears, Roebuck & Co. in 1916-18 and Edna Lane Sauer recalled reading Sears catalogs in the “garden house” on Michigan Island.¹

Kitchen

Although the museum collection includes about 15 small kitchen utensils, an apron, and a set of lawn kitchen curtains used by the Bentons, specific information on how they furnished their kitchen is lacking. There is some evidence for Raspberry Island from before and after the Bentons’ time and very good evidence on the Lane’s pre-1929 kitchen on Michigan Island, all of which adds up to a rather complete picture of a typical Apostle Islands lighthouse kitchen of the 1920s. The furnishings will include an original stove of the period from Michigan Island, the Benton utensils, and other period pieces.

Visitors will enter the kitchen by the back door and cross the center of the room to exit through the pantry. A rubber or synthetic runner will define the path and protect the varnished floor. No barrier is needed. The cellar door and kitchen closet door will remain closed and no furnishings will be placed in the closet.

¹ Harry W. Thompson, manuscript diary, 1913-1919, Split Rock Lighthouse, Two Harbors, MN; Sauer interview, 1985.

Kitchen Furnishings		
Object and Location	Evidence	Recommendation
COOKSTOVE (west side)	Figure 12; Christy McLean Ethan, interview, 1989	Use APIS 2507, "Queen's Best" coal range, manufactured by Cedar Grove Stove Company, Cedar Grove, Wisconsin, ca. 1920; this stove came from one of the Michigan Island Light Station buildings and fits Mrs. Ethan's memory of a "black and silver" wood stove "with a warming closet above"
STOVEPIPE, with elbow	Common usage	Acquire modern stovepipe
STOVE BOARD, metal (under range)	Common usage; station journal, June 6, 1931: "painted zink...in first asst. quarters"; Sears, Roebuck catalog 117, 1908, p. 466	Acquire period or modern metal stove board; paint black
COAL HOD (left of stove)	Common usage; Sears, Roebuck catalog 117, 1908, p. 466	Acquire period artifact
COAL, chestnut (in coal hod)	Station journal, Sept. 30, 1912	Acquire
STOVE SHOVEL, STOVE POKER, STOVE LID LIFTER	Common usage; Sears, Roebuck catalog 117, 1908, p. 466	Acquire period artifacts
STOVE BRUSH (hanging near stove)	Common usage	Use original brush (APIS 2507)
TEA KETTLE (on cookstove)	Common usage; Sears, Roebuck catalog 117, 1908, p. 462	Use APIS 714, blue and white enamel tea kettle found on Basswood Island
WOODBBOX, with hinged lid (east wall, opposite stove)	Edna Lane Sauer (Michigan Island), interview, 1982	Acquire period woodbox or reproduce; paint gray; construct false bottom deep enough to hold two layers of firewood
FIREWOOD (in woodbox)	Station journal, July 21, 1920: "beach wood for dwelling"; July 4, 1927: collected birch wood	Collect local driftwood and birch wood; saw "stove length" and split; treat for insects; place in wood box with small pieces on top for kindling
MATCH SAFE (on left side of chimney)	Common usage; Sears, Roebuck catalog 117, 1908, p. 465	Acquire period tin match box holder
COFFEE MILL (on top of warming oven), COFFEE CAN, and COFFEEPOT	Edna Lane Sauer, interview, 1989, remembering objects on shelf above cookstove, Michigan Island, ca. 1900-14	Use gray enameled coffeepot (APIS 723), found on South Twin Island; acquire period box coffee mill and tin coffee can (Sears, Roebuck catalogue 117, 1908, pp.469 and 534)

Kitchen Furnishings		
Object and Location	Evidence	Recommendation
CUPBOARD (against west wall, left of stove)	Station journal, Nov. 21, 1911: "painted the two cupboards in keeper's quarters" the day after washing kitchen walls and ceiling	Acquire period pine cupboard, about 3-4 feet wide and 4-5 feet high, very plain; paint gray; display with one door partly open to show contents
Contents of cupboard JUICER, glass MINCER ROASTER, cast iron COLANDER, enameled WAFFLE IRON, stove-top EGGBEATER, iron SAUCEPAN, retinned or gray enameled (in cupboard) PRESERVING KETTLE, retinned or enameled cast iron SPIDER or SKILLET, steel or cast iron BREAD PAN, tin	Common usage	Use Benton juicer, and mincer (APIS 215, 239); period roaster, colander, waffle iron, and eggbeater from other local sites (APIS 82, 110, 115, 688); acquire period saucepan, preserving kettle, spider or skillet, and breadpan (Sears, Roebuck catalog, 117, 1908, pp. 461-465)
Utensils hanging from nails on side of cupboard SKIMMER, tin LADLE, tin DIPPER, enameled LADLE, enameled	Common usage	Use Benton skimmer (APIS 240), ladles and dipper from other local sites (APIS 112, 149, 2231)
SAD IRONS (2) and STAND (on top of cupboard)	Common usage	Acquire period sad irons and stand (Sears, Roebuck catalog 117, 1908, p. 467)
SINK, cast iron, set in varnished wood frame supported by iron brackets (right of stove), with exposed DRAIN PIPE	1905 construction drawing (fig. 23); references in station journal to revarnishing sink (May 23, 1925), renewing "woodwork on sink" and "varnishing sink" (May 24, June 11, 1928); Sears, Roebuck catalog 111, 1902, p. 654	Acquire period or reproduction cast iron sink, 16" x 24" x 6", and 1 1/4" iron pipe and trap; paint sink and pipe black; construct frame to hold sink with extensions to left and right for pump and drainboard; support frame by period style iron brackets under sink and wood cleats on chimney breast and north wall; varnish woodwork to match room woodwork

Kitchen Furnishings		
Object and Location	Evidence	Recommendation
PITCHER SPOUT PUMP (on left side of sink framing) and exposed SUPPLY PIPE	1905 construction drawing (fig. 23); references in station journals: "worked kitchen pump" and "fixed suction pipe, put on foot valve kitchen pump" (May 1 and 21, 1925); "removed black iron 1 1/4" pipe line from cistern to kitchen [assistants' side, 2d floor], and put in new galvanized iron pipe instead, connected to hand pump" (Nov. 26, 1926); Sears, Roebuck catalog 117, 1908, p. 616	Acquire period pump, 2 1/2 or 3" cylinder and 1 1/4" iron pipe; paint black
DRAINBOARD (right side of sink framing)	1905 construction drawing (fig. 23)	Construct as part of sink framing, with drainboard slightly angled up to right and grooved; varnish
WASH BASIN, gray enameled (upside down on drainboard)	Common usage; Sears, Roebuck catalog 117, 1908, p. 461	Use APIS 114, a period wash basin of local origin
SOAP DISH, gray enameled (mounted on wall above sink)	Common usage; Sears, Roebuck catalog 117, 1908, pp. 461-463	Acquire period example
SOAP, white, bar (in soap dish)	Christy McLean Ethan, interview, 1989	Acquire bar of modern soap; display in half-used condition
DISH MOP (on drainboard)	Common usage; Montgomery Ward catalog 83, 1914, p. 481	Reproduce
DISII TOWEL (on drainboard)	Common usage; Montgomery Ward catalog 83, 1914, p. 63	Use reproduction unbleached crash toweling, blue line border
ROLLER TOWEL (on wall to right of drainboard)	Edna Lane Sauer (Michigan Island), interview, 1989	Acquire period roller; use reproduction unbleached crash toweling, blue line border
WORK TABLE (in front of north window)	Common usage; 1945 photograph of Raspberry Island kitchen (fig. 25); almost identical table in 1915 Sears, Roebuck catalog 130, p. 1018	Acquire similar period table; paint gray
OILCLOTH (on table)	Common usage	Use a modern oilcloth, plain white or a pattern similar to those pictured on p. 449 of Montgomery Ward catalog 83, 1914, and on p. 16 of Sears, Roebuck catalog 130, 1915; tack down under table top

Kitchen Furnishings		
Object and Location	Evidence	Recommendation
COOKBOOK and RECIPE BOOKLET (on table)	Common usage; Edna Lane Sauer, interview, 1989	Acquire a ca. 1905 cook-book and a Royal Baking Powder recipe booklet, 1905-18; open one to a pie recipe
PIE PAN (on table) ROLLING PIN (on table) BREAD KNIFE (in half-open table drawer) PARING KNIFE FORKS (3), 3-tine (in drawer) CORKSCREW (in drawer) NUTMEG GRATER (in drawer)	Common usage	Use Benton-associated items, APIS 207, 233, 234, 241, 244, 406, and 432 (rolling pin)
CALENDAR, 1914-22 (on east wall, left of window)	Common usage	Acquire three period calendars, with Bayfield or Ashland advertising; use in rotation (monthly) to minimize fading
KITCHEN TABLE (in front of east window)	Common usage; Edna Lane Sauer and Christy McLean Ethan interviews	Acquire period oak table; retain natural finish
OILCLOTH (on kitchen table)	Common usage	Use modern oilcloth, white or of a pattern similar to those pictured on p. 449 of Montgomery Ward catalog 83, 1914, and p. 16 of Sears, Roebuck catalog 130, 1915; cut to provide a three or four inch overhang all around
KEROSENE LAMP (on table)	Common usage	Use APIS 453, Benton-associated kerosene table lamp with glass reservoir base; acquire wick and chimney
CHAIRS (4), spindle back, wood seats (3 at table, 1 against north wall)	Common usage; three required for the daily use of the Benton family	Use APIS 293 and 311, original Benton chairs (fig. 44-45)
APRON (over back of one chair)	Common usage	Reproduce embroidered apron in Benton collection (APIS 463)
PITCHER, gray enameled (on table)	Common usage	Use APIS 31, found on Michigan Island

Kitchen Furnishings		
Object and Location	Evidence	Recommendation
ARTIFICIAL FLOWERS (in pitcher)	Raspberry Island and Michigan Island were both noted for their flower gardens; among the flowers mentioned are pansies, tea roses, foxgloves, carnations, peonies, larkspur, sweet peas, California poppies, golden glow, dahlias, nasturtiums, daisies, and brown-eyed susans (Edna Lane Sauer, interview, 1982)	Use cut flowers from station garden or acquire silk flowers of several appropriate varieties; change display periodically to reflect seasonal changes
CUP, gray enameled (on table)	Common usage	Use APIS 30, found on Michigan Island
CURTAINS (for two windows and back door)	1922 photograph (fig. 4) showing plain white curtain in east window; pair of lawn kitchen curtains in Benton collection (APIS acc. 219)	Fabricate 2 sets of plain white lawn curtains for the window and door, based on Benton-associated curtains
WINDOW SHADES (on 2 windows)	1922 photograph (fig. 4)	Retain modern green shades; no shade is recommended for the door which faces north and is shaded by a porch roof
FLOOR COVERING	Since the evidence presented on p. 50 suggests that the kitchen floor was bare at least through Keeper Benton's time, no floor covering is recommended other than the modern protective runner visitors will walk on.	

Pantry

An open alcove off the passage between dining room and kitchen, the pantry provided storage space on its four shelves for dishes and glassware used in the dining room, along with jars of pickles, preserves, and home-canned vegetables and fruit, store-bought canned and boxed foods, and other non-perishable foodstuffs used in the kitchen for cooking and baking.

In the Apostle Islands National Lakeshore collection there are about 30 pieces of china and glassware and 9 pieces of flatware believed to have been used by the Bentons on Raspberry Island. These will be displayed on the pantry shelves with a selection of period and reproduced food containers. For their protection from handling and theft, the open shelves will be fitted with a glass or plexiglass barrier, removable for cleaning. A runner will define the visitor path from the kitchen, past the pantry, and into the dining room.

Pantry Furnishings		
Object and Location	Evidence	Recommendation
CURTAIN	White curtains, possibly of a lacy material, are visible in the pantry window in a 1922 photograph (fig. 4)	Fabricate 2 sets of curtains, using modern cotton, lace material; alternate to minimize light damage
WINDOW SHADE, dark	Visible in 1922 photograph (fig. 4)	Retain modern dark green shade
DISHES in Benton Collection, APIS DINNER PLATES (6), "Brighton" pattern, by Handley DINNER PLATE, "Heather" pattern, by Edwards SALAD PLATES (4), "Brighton" pattern, by Handley SOUP BOWL, "Derwood" pattern BERRY SET of bowl and 6 saucers, rose pattern BERRY DISH, SAUCEBOAT, SUGAR AND CREAMER, Bavarian		Use originals APIS 209, 318 APIS 217 APIS 209 APIS 218 APIS 208 (fig. 43) APIS 209, 216
GLASSWARE in Benton Collection, APIS SUGAR BOWL, glass; JAM JAR, metal cover; SUGAR BOWL, amethyst glass; EGG CUP, amethyst glass; FRUIT BOWL, amethyst glass; TOOTHPICK HOLDER, amethyst glass; TOOTHPICKS		Use originals APIS 339, 423 APIS 414, 212 APIS 211, 213 acquire toothpicks
BABY CUP, Britannia metal	Benton Collection, APIS	Use APIS 334
TRAY, aluminum	Benton Collection, APIS	Use APIS 449
MASON and JELLY JARS, with simulated contents	Platske, interview, 1989	Acquire jars; simulate contents (jams, jelly, beans, peas, pickles, etc.)
TIN CANS, with reproduced labels	Platske, interview, 1989	Use modern cans; reproduce period labels for canned goods, such as corn, tomatoes, beans, peas, and evaporated milk
BOXES and TINS	Common usage	Acquire period boxes for condiments, spices, baking soda, baking powder, corn starch, etc.
FLOUR BARREL	Platske, interview, 1989; Sauer, interview, 1982	Acquire period or reproduction barrel with handled top
COFFEE CAN	Common usage	Acquire period coffee can
CRACKER BOX	Common usage	Acquire period cracker box
COOKIE JAR	Platske, interview, 1989	Acquire period cookie jar

Dining Room

Based chiefly on Christy McLean Ethan's memories (1909-16), the 1907 photograph of the Benton dining room in Bayfield, and surviving Benton-associated artifacts, the Raspberry Island dining room will reflect its daily use as the keeper's office/watch room and his wife's sewing room and its occasional use as a formal dining room for entertaining visitors. Original Benton furnishings include a hanging Aladdin lamp and a number of Lee

Benton's technical books; a barometer from Michigan Island (Lane family) is also in the collection.

Visitors will enter from the pantry, walk through the dining room along the west wall, and exit into the living room. A dark runner will define the visitor path and no barrier is needed.

Dining Room Furnishings		
Object and Location	Evidence	Recommendation
HEATING STOVE (south-west corner)	Sauer, interview, 1989: the dining room stove was replaced in summer by a stand (Michigan Island, pre-1914)	Acquire period wood-burning stove, similar in style to the Acme Buckeye pictured on p. 654 of Sears, Roebuck catalog 117, 1908; leave in place throughout the summer
STOVEPIPE, 6"	Common usage	Acquire modern stovepipe and elbow
STOVE BOARD (under stove)	Common usage; Sears, Roebuck catalog 117, 1908, p. 466	Acquire period or similar metal stove board
POKER (leaning against wall)	Common usage; Sears, Roebuck catalog 117, 1908, p. 466	Acquire period stove poker
SEWING MACHINE, Singer (in front of south window)	Ethan, interview, 1989; Durocher, interview, 1980	Acquire ca. 1905-15 Singer sewing machine
PHOTOGRAPH (south wall, east of window)	Benton Collection, APIS	Reproduce framed photograph of Devils Island Light (APIS 1429)
DESK, roll-top (against east wall, southeast corner)	Ethan, Sauer, and Platske interviews	Acquire period roll-top desk, similar to those on p. 755, Sears, Roebuck catalog 111, 1902
KEROSENE LAMP (on desk top)	Common usage; Platske interview, 1989	Acquire period kerosene table lamp, plain white shade
STATION JOURNAL (open, on desk surface)	Platske interview, 1989	Reproduce station journal book; copy (by hand, in India ink) several days' entries from the summer of 1922; alternate pages on display daily to minimize fading

Dining Room Furnishings		
Object and Location	Evidence	Recommendation
FORMS (on desk) WRITING PAPER AND OFFICIAL-SIZE ENVELOPES (on desk)	Keeper's Annual Property Returns, Split Rock Light Station, 1915 and 1925	Reproduce cover of Form 30, Keeper's Annual Property Return (Split Rock Lighthouse Collection), fill it with 10 folded pages of blank paper, and lay beside station journal; place plain off-white writing paper and envelopes in pigeonholes
DITTY BOX (on desk)	Benton Collection, APIS	Use APIS 464, Lee Benton's ditty box
INK STAND and PEN (on desk)	Keeper's Annual Property Return, Split Rock, 1915	Acquire period inkstand, wood penholder, and steel pen nib; place beside journal
BLOTTERS (3, on desk)	Keeper's Annual Property Return, Split Rock, 1915	Acquire period blotters; place one on open journal, others in pigeonhole
BILL SPINDLE (on desk) and BILLS	Common usage; Benton Collection, APIS	Use APIS 271, with machine copies of original bills in Benton collection
ASHTRAY, glass (on desk)	Benton Collection, APIS	Use APIS 415; place beside journal
PIPE, briar, (in ashtray)	Figure 11, showing Keeper Benton with a pipe in his mouth	Acquire period briar pipe, straight stem
TOBACCO CAN (on desk, beside ashtray)	Mel Erickson, interview, 1982: found a Prince Albert tobacco can in root cellar, Raspberry Island, in the 1960s or 1970s	Acquire a Prince Albert tobacco can, ca. 1915-25
BINOCULARS (on desk top)	Benton Collection, APIS	Use original binoculars, APIS 280
BAROMETER (on desk top)	Sauer, interview, 1982: her father (Michigan Island) kept the barometer on his desk	Use original barometer from Michigan Island (APIS Acc. 280)
BOOKS (up to 6, on desk top) <i>Blue Jacket's Manual</i> (1902), APIS 329; <i>The Practical Gas Engineer</i> (1910), APIS 330; <i>The Petty Officer's Drill Book</i> (1902), APIS 331; Conklin's <i>Vest Pocket Argument Settler</i> , APIS 260 1912-24 of <i>Instructions to Light-Keepers; Regulations and Instructions...U.S. Lighthouse Service;</i> <i>and Medical Handbook...U.S. Lighthouse Service</i>	Benton Collection, APIS, and common usage	Use technical books owned by Lee Benton: Acquire any edition
CHAIR (at desk)	Common usage	Use oak side chair from Benton Collection (APIS 290) (fig. 44)

Dining Room Furnishings

Object and Location	Evidence	Recommendation
PARLOR TABLE (in front of east window)	Common usage; Sauer, interview, 1982	Acquire period example (Sears, Roebuck catalog 117, p. 401)
TABLE COVER, square (on table)	Common usage	Use APIS 230, from Benton Collection
TABLE, extension, oak (center of room)	Photograph of Benton dining room/parlor, 1907 (fig. 16); Ethan and Sauer interviews	Acquire oak extension table similar to No. 1R512, p. 748, Sears, Roebuck catalog 111, 1902
CHAIRS, high-back, wood seat (4)	1907 photograph of Benton dining room in Bayfield (fig. 16)	Acquire 4 matching chairs with 7 spindles, plain top
DOILY, round (center of table)	Common usage	Use APIS 229, 11 1/2" diameter doily from the Benton Collection
BOWL, rose pattern china (on table)	Common usage	Use APIS 408, from Benton Collection
ARTIFICIAL FRUIT or FLOWERS (in bowl)	Common usage	Acquire artificial fruit and fresh or silk flowers; change seasonally
SIDEBOARD (northeast corner, against north wall)	Ethan interview, 1989	Acquire a buffet sideboard similar to those pictured on p. 441, Sears, Roebuck catalog 118, 1909
SIDEBOARD RUNNER	Common usage	Acquire period example
PORCELAIN BASKET (on sideboard)	Benton Collection, APIS	Use original piece, APIS 219
WOODEN BOWL (on sideboard)	Common usage	Acquire period wooden bowl
NUTS (in bowl)	Common usage	Use hickory nuts
NUTCRACKER SET (in bowl)	Benton Collection, APIS	Use APIS 253
PHOTOGRAPHS (east wall, north of window)	Benton Collection, APIS	Reproduce views of three Lake Superior lighthouses: Split Rock, Rock of Ages, and Devils Island (APIS 353, 354, 356); acquire dark wood frames
PHOTOGRAPH (north wall, west of window)	Benton Collection, APIS	Reproduce photograph of Lee Benton in fog signal building, Split Rock Light Station, 1911 (APIS 325); acquire dark wood frame
CLOCK (on west wall)	Platske, interview, 1989; Keeper's Annual Property Return, Split Rock, 1915 (3 marine clocks)	Acquire a pendulum clock, inscribed U.S. Light House Establishment

Dining Room Furnishings		
Object and Location	Evidence	Recommendation
CONGOLEUM ART-RUG	Station journal: "dusted rugs and carpet" (Nov. 6, 1926); "varnished congoleum in keeper's quarters" (Nov. 8, 1929)	Acquire period Congoleum art-rug, or reproduction in synthetic material, about 9' x 12'
HANGING LAMP (center of ceiling)	Ethan, interview, 1989: "There was a thing that came down over the dining room table" (Raspberry Island, 1909-14)	Use hanging Aladdin lamp with KoneKap mantle, from Benton collection (APIS 679, 683, 684); acquire period shade
CURTAINS, lace (3 windows, 2 sets each)	1922 photograph (fig. 4)	Retain modern lace curtains; acquire second, replacement set; alternate yearly
WINDOW SHADES, dark green (3)	1922 photograph (fig. 4)	Retain modern green shades

Living Room

The Bentons' living room probably was furnished rather simply and sparsely, mostly with things acquired between Anna and Lee's marriage in 1906 and Anna's illness in 1918. One clue to its appearance is a 1907 photograph (fig. 14) that shows part of their parlor and dining room in Bayfield in which the very plain wooden chairs and table contrast sharply with the lace curtains in the window and the elaborately draped portieres in the archway. Among the surviving Benton belongings one piece that certainly was in this room is the golden oak Edison phonograph (patented in 1898), with its matching four-drawer stand and a collection of 31 cylinder records and 23 original cardboard tubes. A large oriental-style rug was probably used here also, as well as an Aladdin lamp with an ornamental white glass shade, some of the Bentons' framed photographs of lighthouses and family members, a cribbage board and set of dominoes, stereoscope and stereo cards, and a few other accessories that have been given to Apostle Islands National Lakeshore by Mrs. Marjorie F. Benton, widow of Lee and Anna Benton's son Harold. One late addition would have been the intricate model of a three-masted schooner that Lee Benton made for his second wife, Bess, probably during the winter after their marriage in 1923, now owned by Mrs. Marjorie Benton.

As furnished with these original Benton items and a few other pieces similar to those remembered by Keeper McLean's daughter, the keeper's living room on Raspberry Island will reflect the indoor, leisure-time activities of an Apostle Islands lighthouse keeper and his family between 1909 and 1924.

Visitors will pass from the dining room across the east and south sides of the living room, and leave the room by the enclosed stairway to the second floor

or through the vestibule when the second floor is closed. A dark runner will mark the visitor path. No barrier is needed.

Living Room Furnishings		
Object and Location	Evidence	Recommendation
PORTIERES (in archway), POLE, and BRACKETS	1907 photograph of the Bentons' parlor/dining room in Bayfield (fig. 16); surviving brackets in archway, Raspberry Island	Fabricate two sets of portieres similar in pattern and design to the Benton portieres; alternate sets yearly; acquire wood pole to fit existing brass brackets
RECORD CABINET, oak (in bay, west side)	Durocher and Benton interviews; original cabinet in Benton Collection, APIS	Use original piece, APIS 235
EDISON AMBEROLA VI, PHONOGRAPH, oak case (on record cabinet)	Durocher and Benton interviews; original instrument, ca. 1913/14, in Benton Collection, APIS (fig. 48)	Use original (APIS 205); display with top up and an original record in place
EDISON CYLINDER RECORDS and RECORD CONTAINER	31 records and 23 containers owned by the Bentons, in Benton Collection, APIS	Use one original record in the Edison Amberola; display a few records, in their containers, in a half-open drawer of the cabinet
PARLOR TABLE (in bay, centered in front of window)	Common usage	Acquire parlor table (Sears, Roebuck catalog 117, 1908, p. 401)
DOILY (on table)	Benton Collection, APIS	Use one of the Benton doilies (APIS 222, 228, 229, or 316)
STEREOSCOPE and STEREOGRAPHS (on table)	Benton Collection, APIS	Use Benton stereoscope (APIS 294) and 10 stereographs, 1895-1900 (APIS 301-310)
CRIBBAGE BOARD and DECK OF CARDS (on table)	Benton Collection, APIS	Use Benton cribbage board (APIS 430); acquire a period deck of playing cards
DOMINOES and BOX (on table shelf)	Benton Collection, APIS	Use Benton dominoes in "Our Native Herbs" box, with 1898 proprietary tax stamp and name of agent in Cheboygan, Michigan (APIS 251, 252)
SHIP MODEL (on west wall)	Model of three-masted ship, fully rigged, made by Lee Benton for his second wife and displayed in a shadow box in their homes in Bayfield and probably on Raspberry Island, now owned by Mrs. Marjorie F. Benton, Bayfield (fig. 13)	Fabricate reproduction of original model owned by Mrs. Benton, unless original is made available by her

Living Room Furnishings		
Object and Location	Evidence	Recommendation
COUCH (west wall, under ship model)	Ethan, interview, 1989 (Raspberry Island, 1909-14): a fabric-covered couch in the bay; Christensen, interview (Devils Island, 1925-34): a leather reclining chair; Platske, interview, 1989 (Raspberry Island, 1941-43): a daybed with headboard	Acquire a leather- or fabric-covered, backless couch (Sears, Roebuck catalog 117, 1908, pp. 438-39)
BOOKCASE, home-made (against north wall, west of kitchen passage)	Common usage; Edna Lane Sauer's recollection of furniture made by her father (Michigan Island) out of packing crates	Acquire a period fruit crate with center divider; turn on end for use as bookcase
BOOKS (10, in bookcase)	Nine surviving books owned by the Bentons; one book from Michigan Island with U.S. Light House Establishment bookplate	Use original Benton and USLHE books (APIS 254-256, 258, 259, 332, 1421)
PHOTOGRAPH (north wall, over bookcase)	Benton Collection, APIS	Use touched-up photograph of Lee E. Benton (APIS 277), about 30" x 26", in original frame
LIBRARY TABLE (a little northwest of center of room)	Platske, interview, 1989: had "the typical library table," oak, with a shelf below, in all three of their lighthouse homes (1935 and later)	Acquire an oak or mahogany library table, about 24" x 36", similar to No. 1R1250, on p. 752, Sears, Roebuck catalog 111, 1902
TABLE RUNNER (on library table)	Platske, interview, 1989: typically white, with crocheted ends	Use APIS 231 (or a reproduction), a table runner with embroidered letters: U.S.L.H.S., from the Benton Collection
ALADDIN LAMP (on library table)	Invoice, Mantle Lamp Co. of America to L.E. Benton, Feb. 15, 1924, for six Kone-Kap mantles	Use APIS 221, Aladdin lamp and shade, from Benton Collection
POSTCARD ALBUM (on table)	Benton Collection	Use Benton postcard album (APIS 270); display open to postcards of lighthouses; remove and store other postcards
SIDE CHAIR (south side of table)	Common usage	Acquire chair of same general style as those in dining room
ROCKING CHAIRS (2), (east and west of library table)	Ethan and Sauer interviews	Acquire one rocker with arms and an armless "sewing rocker" (Sears, Roebuck catalog 111, p. 747)

Living Room Furnishings		
Object and Location	Evidence	Recommendation
BANJO (leaning against armed rocker)	Durocher interview	Acquire period banjo
HEATING STOVE (east side)	Station journal, September 9, 1904; Elmer Christensen, interview, recalled a large heating stove with "a lot of nickel plating and isinglass windows" in the living room at Eagle Harbor Light	Acquire a period parlor stove, coal-burning, similar to the Acme Oak on p. 825, Sears, Roebuck catalog 111, 1902.
STOVEPIPE	Common usage	Acquire modern 6" stovepipe and elbow
STOVE BOARD (under stove)	Common usage	Acquire metal stove board
RUG (off-center, toward north and west)	Ethan and Platske interviews	Use original oriental-style rug from Benton Collection (APIS #?, fig. 49); place so that runner for visitors does not lie on the rug
CURTAINS (3 windows, 2 vestibule door windows)	Figures 8, 9 show lace curtains in the outer door of the entry and in the bay	Retain modern lace curtains; acquire replacement set and use alternately
WINDOW SHADES, dark green (3)	Photograph, pre-1919 (APIS 565)	Retain modern shades

Stairs and Upstairs Hall

The stair treads will be protected, as they were in the 1930s, by brown or black rubber or vinyl pads. The stairs will be lighted by the unshaded electric light installed in 1941 in the hall ceiling at the head of the stairs. An additional light may be needed at the foot of the stairs, where there was none historically.

The upstairs hall is too narrow to have contained any furnishings other than the U.S. Light House Service circulating library in its distinctive wall-mounted cabinet, and perhaps two or three photographs. Its floor may have been covered with congoleum runners, but in this heavy use area modern synthetic runners will be substituted to preserve the floor. Tours will visit the back bedroom first (if it contains an exhibit), then the middle bedroom, and finally the front bedroom.

Stairs and Upstairs Hall Furnishings		
Object and Location	Evidence	Recommendation
STAIR TREADS	Undatable physical evidence (fig. 26). Stair treads were in use in the tower as early as 1929 (station journal, June 4, 1929) and were available much earlier (Montgomery Ward catalog 83, 1914, p. 450)	Acquire modern rubber or vinyl stair treads
CEILING LIGHT FIXTURE (hall ceiling, at head of stairs)	Original fixture (1941) in place	Retain original fixture; use modern bulbs, as necessary
TABLE, painted pine (in hall, north wall, outside middle bedroom)	Common usage	Acquire or fabricate a very simple rectangular table, about 30" x 18"; paint gray
LIBRARY CABINET (on table)	Rathbun, "Light Stations," p. 43, places the traveling library upstairs at Raspberry Island Light, citing Barclay/Collins interview	Acquire reproduction of U.S. Light Saving Service traveling library cabinet, U.S. Coast Guard Academy Museum, New London, Connecticut; keep closed except when interpreter opens to show books.
BOOKS (about 50)	Johnson, <i>The Modern Light-House Service</i> , pp. 103-04	Acquire about 50 volumes of 1900-24 fiction, poetry, historical and scientific works, a Bible, and <i>National Geographic</i> magazines

Back Bedroom

Although there is no evidence to indicate whether Harold Benton slept in the middle or back bedroom between 1914 and 1924, the back bedroom was unheated until 1931, when a floor register was put in directly over the kitchen range. For this reason, this plan puts Harold in the heated middle bedroom and recommends using the back bedroom for a small exhibit on the Raspberry Island light keepers and their families. This should be done in such a way as to preserve the original finishes on the woodwork and floor. The only furnishings required are dark window shades and plain white, straight-hung, sheer curtains approximating the appearance, from outside the building, of the middle bedroom curtains in figure 4. The 1941 ceiling light fixture should be retained in this room, supplemented as needed for the exhibit.

Back Bedroom Furnishings		
Object and Location	Evidence	Recommendation
WINDOW SHADES, dark green	Local usage	Retain modern green shades

Back Bedroom Furnishings		
Object and Location	Evidence	Recommendation
CURTAINS (2 windows)	Local usage	Retain modern curtains; acquire replacement set and use alternately

Middle Bedroom

Used by the keepers' children and visitors, as occasion demanded, this was one of two bedrooms that were heated through registers in the floor over the living room stove. Harold Benton is assumed to have used this room rather than the then- unheated back bedroom. The room will look about as it did around 1920, when Harold Benton was 13 years old; its furnishings will reflect his particular interests as represented by objects he once owned, including a toy boat made for him by his father, a battered bugle, a duffle bag, a small pair of binoculars, a pocket knife, a still bank, 140 clay marbles and a pouch full of unpolished agates, a magnifying glass, and a fishing jig. The furniture is typical of the bedroom furnishings remembered by Christy McLean Ethan (Raspberry Island, 1909-16) and Frances Carpenter Platske (Outer Island, 1935-41, and Raspberry Island, 1941-43). Since the windows give adequate light, the 1941 ceiling light should be removed.

Visitors will look into this room from the hall over a plexiglass barrier.

Middle Bedroom Furnishings		
Object and Location	Evidence	Recommendation
CONGOLEUM ART-RUG	Physical evidence of 9'6" x 7' floor covering, which was on the floor the last time the floor was painted; station journal entry of Nov. 8, 1929: "varnished congoileum in keeper's quarters"	Acquire period Congoleum Art-Rug or reproduction in synthetic material; apply clear varnish coat
BED, single, cast iron, white enamel finish (head against west wall, northwest corner)	Ethan and Platske interviews; both remembered white iron beds	Acquire period single bed, white-enameled cast iron, with wire spring, similar to the simpler models on pp. 763-64, Sears, Roebuck catalog 111, 1902
MATTRESS	Sears, Roebuck catalog 111, 1902, p. 766	Fabricate thin mattress with modern ticking stuffed with synthetic material such as chopped foam rubber
SHEETS (2)	Sears, Roebuck catalog 111, 1902, p. 859	Use modern muslin sheets

Middle Bedroom Furnishings		
Object and Location	Evidence	Recommendation
QUILT	Benton Collection, APIS	Use original quilt (APIS 466) or a reproduction
BLANKET	Benton Collection, APIS; Montgomery Ward catalog 83, 1914, pp. 68-69	Use original army blanket (APIS 468)
PILLOW		Use modern pillow ticking, stuffed loosely with chopped foam rubber
PILLOWCASE, embroidered	Cf. the Bentons' embroidered bolster covers (APIS 2017)	Acquire period or modern embroidered pillowcase
CHAMBER POT, white ironstone (under bed)	Ethan interview; common usage	Acquire period chamber pot
RAG RUG (beside bed)	Ethan and Platske interviews	Acquire period or modern oval rag rug
CHEST OF DRAWERS (south wall)	Common usage	Acquire period pine chest of drawers; paint white
DRESSER CLOTH (on chest of drawers)	Common usage	Acquire period example
STILL BANK (on chest of drawers)	Benton Collection, APIS	Use original bank (APIS 247)
COMB (on chest of drawers)	Common usage	Acquire period man's comb
PHOTOGRAPH OF LEE BENTON (on chest of drawers)	Benton Collection, APIS	Reproduce small photograph of Benton in rowboat; place in original oval frame (APIS 333)
PHOTOGRAPH OF ANNA BENTON (on east wall, beside chest of drawers)	Benton Collection, APIS	Reproduce small photograph of Anna Benton (APIS 343); fabricate similar mount; hang by ribbon from small nail
MIRROR, white frame (on wall above chest of drawers)	Common usage	Use original Benton mirror (APIS 460, fig. 50)
CHAIR (in front of windows)	Common usage	Acquire period bow-back chair; paint gray
TABLE (in front of windows)	Common usage	Use homemade table found on site, painted gray
KEROSENE HAND LAMP (on table)	Common usage	Acquire period hand lamp, glass base (Sears, Roebuck catalog 111, 1902, p. 801)
KODAK BELLOWS CAMERA	Figure 17	Acquire period camera
FISHING POLE (standing in northeast corner)	Harold Benton's known interest in fishing	Acquire period fishing rod (Sears, Roebuck catalog 130, 1915, pp. 824-25)
DUFFLE BAG (lying on bed)		Use APIS 261, original duffle bag from Benton Collection

Middle Bedroom Furnishings		
Object and Location	Evidence	Recommendation
BOY'S POSSESSIONS (on table)		Use the following original objects from Benton Collection, APIS
POCKET KNIFE (APIS 242) TOY BOAT, made for Harold Benton by his father (APIS 246) AGATES and POUCH (APIS 248) MARBLES, clay (APIS 250); acquire period box to hold marbles BINOCULARS (APIS 279) MAGNIFYING GLASS (APIS 282) BUGLE (APIS 249) FISHING JIG: spindle, twine, lure and hook (APIS 268)		
RIFLE (standing in north-east corner)	Harold Benton's interest in hunting	Use one of the two rifles in Benton Collection: APIS 298, .44 cal. Iver Johnson "Champion" or APIS 299, .25 cal. Quackenbush (preferably the one in fig. 19)
PHOTOGRAPH OF HAROLD (south wall, southwest corner)	Benton Collection, APIS (fig. 6)	Reproduce photograph of Harold with duck and rifle (APIS 346); fabricate similar mount and tack to wall
CURTAINS (2 windows)	1922 photograph (fig. 4)	Retain modern net curtains; acquire replacement set and use alternately
WINDOW SHADES, dark green (2)	1922 photograph (fig. 4)	Retain modern green shades

Front Bedroom

With its direct access to the tower, the front bedroom was clearly intended to be the keeper's bedroom. Its furniture reflects the time (1914-24) and place, as remembered by former residents of Apostle Islands lighthouses. Furnishings directly associated with the Benton family include a bedspread, quilt, and blanket, a pillowcase and two embroidered bolster covers, Lee Benton's shaving brush, Anna Benton's Bible, two of her combs and a hatpin, two toilet bottles, a washbowl, and a number of family photographs. Since the south-facing windows provide plenty of light, the 1941 ceiling light fixture should be removed.

Visitors will enter this room from the hall, view it from the west side, and exit to the tower through the door in the southwest corner. A dark runner will define the visitor path and protect the painted floor.

Front Bedroom Furnishings		
Object and Location	Evidence	Recommendation
TRUNK (north wall, between doors)	Common usage	Use APIS 291, original trunk in Benton Collection
PHOTOGRAPH OF LEE BENTON (on wall above trunk)	Benton Collection, APIS	Reproduce photograph of Coxswain Benton, U.S. Navy, ca. 1902 (APIS 322); fabricate dark oak frame
DRESSER, painted (north wall, east end)	Common usage; Platske, interview, 1989; Sears, Roebuck catalog 117, 1908, p. 762	Acquire period dresser; paint white
DRESSER SCARF	Common usage	Acquire period example
TOILET BOTTLES (2) (on dresser)	Benton Collection, APIS	Use original bottles (APIS 405)
COMBS (2) and HATPIN, Anna Benton's (on dresser)	Benton Collection	Use originals (APIS 410-412)
PINCUSHION (on dresser)	Common usage	Acquire period pincushion
DRESSER SET, celluloid (on dresser)	Common usage	Acquire period dresser set
KEROSENE HAND LAMP (on dresser)	Common usage	Acquire period hand lamp (Sears, Roebuck catalog 111, 1902, p. 801)
PHOTOGRAPH OF ANNA BENTON (south wall, next to tower door)	Benton Collection, APIS	Reproduce photograph of Anna Benton (APIS 292); use original frame
ROCKING CHAIR, armless (in front of chimney breast, east wall)	Common usage	Acquire period sewing rocker (Sears, Roebuck catalog 111, 1902, p. 747)
BIBLE, Anna Benton's (on chair)	Benton Collection, APIS	Use original Bible (APIS 257)
BED, double, white-enameled cast iron (head against east wall, southeast corner)	Ethan and Platske interviews	Acquire period double bed similar to simpler models on pp. 763-64, Sears, Roebuck catalog 111, 1902
MATTRESS	Sears, Roebuck catalog 111, 1902, p. 766	Fabricate thin mattress using modern ticking, stuffed loosely with synthetic material such as chopped foam rubber
SHEETS (2)	Sears, Roebuck catalog 111, 1902, p. 859	Use modern muslin sheets
BLANKET	Montgomery Ward catalog 83, 1914, pp. 66-68	Use original patterned blanket in Benton Collection (APIS 3?)
PILLOWS (2)		Use modern pillow ticking, stuff loosely with chopped foam rubber

Front Bedroom Furnishings		
Object and Location	Evidence	Recommendation
PILLOW SHAMS (2)	Benton Collection, APIS	Reproduce (APIS 461 a-b), pair of pillow shams embroidered by Anna or Lee Benton
BEDSPREAD, white	Benton Collection, APIS	Use original Benton bedspread or similar period bedspread
CHAMBER POT, white ironstone (under bed)	Ethan interview; common usage	Acquire period chamber pot
WASHSTAND (in front of west window)	Common usage	Acquire period washstand like No. 1R1900, Sears, Roebuck catalog 111, 1902, p. 761
DRESSER SCARF (on washstand)	Common usage	Acquire period dresser scarf
TOWELS, huck (2)	Sears, Roebuck catalog 130, 1915, p. 27	Acquire period white or red-bordered huck towels
WASHBOWL (on washstand)	Common usage	Use original bowl, "Verona" pattern, in Benton Collection (APIS 220, fig. 51)
PITCHER (in bowl on washstand)	Common usage	Acquire period pitcher of same pattern or plain white
SOAP DISH (on washstand)	Common usage	Acquire period soap dish of same pattern or plain white
SOAP	Ethan interview	Acquire bar of white soap
TOOTHBRUSH HOLDER (on washstand)	Common usage	Acquire toothbrush holder of same pattern or plain white
TOOTHBRUSHES (2)	Common usage; Sears, Roebuck catalog 130, 1915, p. 609	Acquire two period celluloid toothbrushes or similar modern plastic toothbrushes
DENTIFRICE CAN OR BOTTLE (on washstand)	Sears, Roebuck catalog 130, 1915, p. 609	Acquire period container
SHAVING MUG (on washstand)	Common usage	Acquire period shaving mug
SHAVING BRUSH (on washstand)	Benton Collection, APIS	Use original brush (APIS 283)
RAZOR (on washstand)	Common usage	Acquire period straight razor; display closed
RAZOR STROP (on washstand)	Sears, Roebuck catalog 111, 1902, p. 497	Acquire strop with handle, two- or four-sided
SHAVING MIRROR (on wall, right of window)	Common usage	Acquire small, rectangular, wood-framed mirror of the period
BRAIDED RUG, round (partly under bed)	Common usage	Acquire period braided rag rug large enough to stick out on both sides of the bed

Front Bedroom Furnishings		
Object and Location	Evidence	Recommendation
CURTAINS (2 windows)	Figures 3, 8 (1922) shows white curtains in the front bedrooms on both sides of the dwelling	Retain modern curtains; acquire replacement set and use alternately.
WINDOW SHADES, dark green (2)	Figures 3, 8	Retain modern green shades

Tower

Some visitors will go up the winding stairs in the tower to the third level and climb the ladder-like steps to the lantern, where they will see at least the pedestal of the original lens and enjoy the 360-degree view of the islands and lake before descending to the ground floor level of the tower. Visitors who do not want to go up to the lantern can go directly down the tower stairs to the ground floor, exiting onto the keeper's front porch.

Rubber or vinyl stair treads, similar to those put down in 1929, will protect the tower stairs. The other furnishings will be dark window shades and lace curtains in the first- and second-level windows, curtains in the lantern, "canvas rugs" on the lantern and tower floors, and the 1931-33 watchbook on a shelf at the bottom of the tower stairs. If the State Historical Society of Wisconsin can be persuaded to return Raspberry Island's original 5th-order Fresnel lens, it should be placed in the lighthouse and fitted, if possible, with a Hains 5th-order wick lamp and the clockwork apparatus that made the lens revolve.

Tower Furnishings		
Object and Location	Evidence	Recommendation
SHELF (on wall of ground-floor tower room)	Station journal, July 18, 1933: "base of tower varnished, rearranged shelf for watch book"	Fabricate and varnish shelf, 30" x 14"; mount on wall with iron bracket supports, about 40" off the floor
WATCHBOOK (on shelf)	Station journal, July 18, 1933	Reproduce Raspberry Island watchbook, 1931-33 (APIS 55); display open to reproduced double-page spread
HAND LANTERN (on shelf)	Keeper's Annual Property Return, Split Rock Light, 1915, p. 9	Acquire period hand lantern (Sears, Roebuck catalog 111, 1902, p. 594)
INKWELL, PEN, AND BLOTTER (on shelf)	Common usage	Acquire period glass inkwell, steel pen and wood penholder, piece of used blotting paper

Tower Furnishings		
Object and Location	Evidence	Recommendation
STAIR TREADS, rubber or vinyl	Station journal, June 24, 1929; Montgomery Ward catalog 83, 1914, p. 450	Acquire modern rubber or vinyl stair treads
WEIGHT FLUE (1st and 2d levels)	Physical evidence	Reinstall original weight flue
CURTAINS (2 windows)	Photograph ca. 1920 (fig. 8) shows lace curtains in the first and second level windows; in figures 3 and 4 the third level windows do not appear to be curtained	Retain curtains installed in 1986; acquire replacement set and use alternately
WINDOW SHADES, dark green (2)	Photograph ca. 1920 (fig. 8) shows a dark shade in the first level window; figures 3 and 4 show the third-level windows, but it is impossible to tell whether they have shades	Retain shades installed in 1986 on first and second levels

Service Room

Although the third level of the tower clearly was used as a service room where the keepers cleaned the lamps, changed wicks, and performed other chores connected with the care of the light, there is insufficient evidence at this point to recommend its refurnishing. Physical evidence on the floor and baseboard indicates that there was some sort of a table or counter in the southwest corner, measuring 42" by 18", but its appearance can only be guessed at. If there was any shelving, replastering of the walls has obliterated the evidence for it. Also unresolved is the question whether light-house supplies were kept in the service room or in a separate supply room, as yet unidentified. If answers to these questions are found, the desirability of refurnishing the service room can be reconsidered.

Lantern

If possible, the lantern should be restored to its pre-1947 appearance, complete with lens, lamp, and clockwork apparatus. Without these major elements, the view will be the main attraction. The lantern curtains should be kept closed except when visitors are in the lantern.

Lantern Furnishings		
Object and Location	Evidence	Recommendation
LANTERN CURTAINS (inside lantern)	Figure 4 (1922); drawing in File 282, April 26, 1901, Light House Board Contracts, RG 26, NA	Fabricate curtains of unbleached linen; mount on spring rollers
CANVAS RUGS (on lantern and tower floors)	See Evidence section, above, p. 69	Fabricate canvas rugs to cover lantern deck and tower floors, except stairs; apply two coats of gray paint
PEDESTAL (in lantern)	In place; color specified in Lighthouse Service, <i>Instructions to Employees... 1915</i> , p. 33	Paint brown
If available, place in the lantern the following:		
LENS, 5th-order Fresnel	Original Raspberry Island Light Station lens, installed in 1863, removed about 1952	Negotiate loan of original lens, now owned by the State Historical Society of Wisconsin
CLOCKWORK APPARATUS	Shanks and Shanks, <i>Lighthouses of San Francisco Bay</i> , p. 11, illustration credited to "an old French lens catalog," ca. 1900, courtesy U.S. Coast Guard	Acquire period clockwork and weight
LAMP, Hains 5th-order, with 1 1/4" wick	Station journal, Sept. 19, 1931; Rathbun, "Light Stations," p. 122	Acquire period lamp

Fog Signal Building

Before or after their tour of the keeper's dwelling and light tower, visitors will have an opportunity to walk through the fog signal building from the front (west) door to the back (north) door.

The Interpretive Prospectus for Apostle Islands National Lakeshore calls for the fog signal building to be "furnished with the total complement of period equipment that would have been in place during its operation." The evidence presented in this report shows that two entirely distinct sets of fog signal apparatus occupied the same space in the front portion of the building between 1903 and 1947—steam boilers and engines until 1932, diesel-powered engines and air compressors thereafter. Obviously, both cannot be exhibited in place at the same time. The choice, then, is between replacing the steam equipment, which was in operation at the time to which the keeper's quarters and tower are being interpreted, or the air diaphone system installed in 1932.

While none of the original steam equipment survives on Raspberry Island or in other Apostle Islands fog signal buildings and there are no known

photographs showing either system in place, the 1896 boiler specifications and drawings (Appendix L) and the construction drawing for repairs to the Raspberry Island fog signal in 1925 (figures 30-31), provide good information on the location and general configuration of the steam apparatus, but probably not enough to support an attempt to re-create the whole complex system of steam boilers, engines, and piping. The 1932 drawings (figures 34-37), on the other hand, provide enough information on the engines, air compressors, piping, and other components of the air diaphone system to permit an accurate reconstruction, if the appropriate equipment can be located. Structurally, Raspberry Island's existing fog signal building also reflects this period, since it retains the interior diaphone platform and the exterior dormer that housed it from 1932 to 1947; accurate restoration of the steam whistle system would entail removal of these later features.

This report recommends, therefore, on the basis of available evidence, that an effort be made to acquire an air diaphone system similar to the one installed on Raspberry Island in 1932. The air diaphone equipment surviving in place on Outer Island needs to be studied to see if it would fit the bill. For the east end of the fog signal building, this report recommends retaining in place what remains of the 1941 electrical system (battery bank, switchboard, and ceiling lights), along with the 1946 Kohler generator and the pre-1932 workbench and cupboard (figures 40-43). All of these were in the building with the air diaphone signal equipment.

If it proves impossible to find or prohibitively expensive to obtain the air diaphone equipment, the space formerly occupied by the steam and air equipment could be used for an exhibit explaining the fog signal systems used at Raspberry Island Light Station from 1903 to 1952, including the CO-2 fog bell equipment installed in 1947.

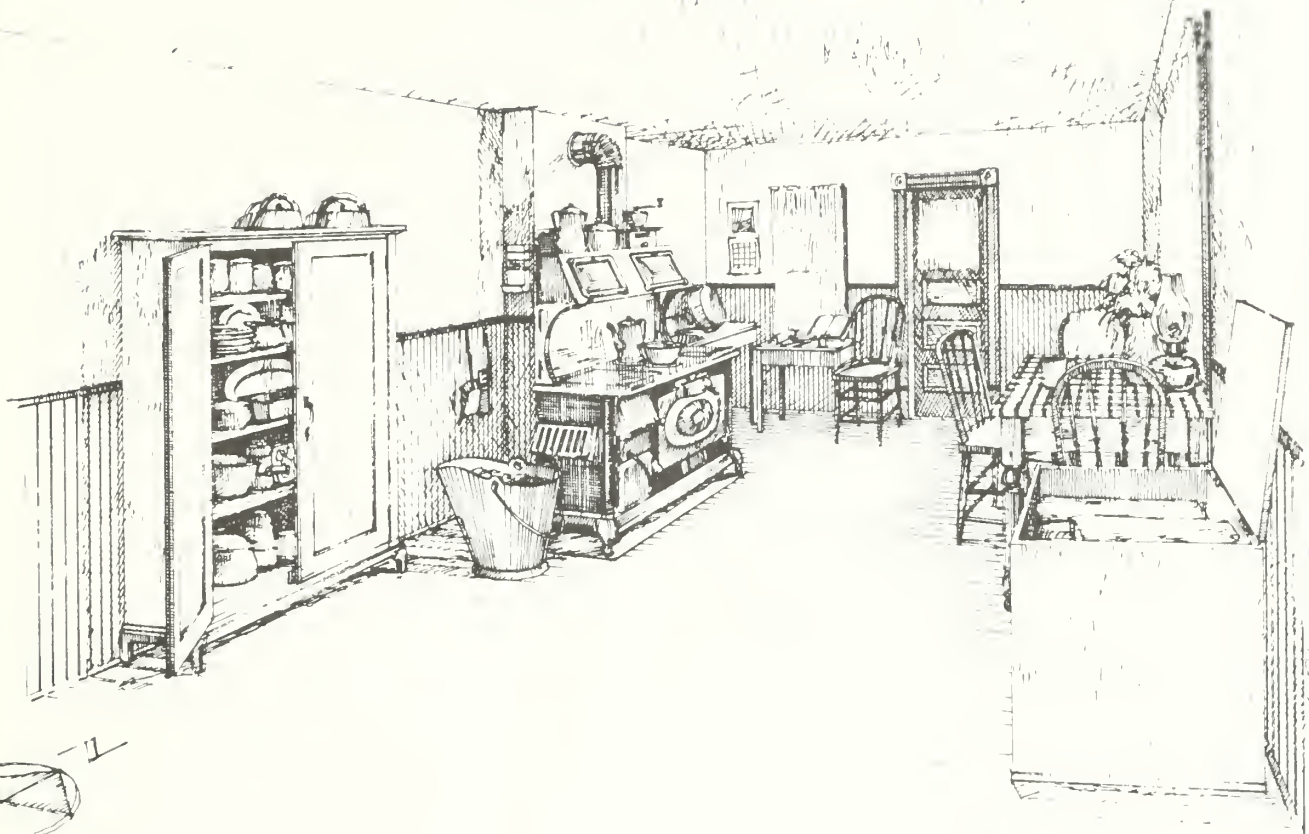
Inside the building the existing pattern of gray paint on the floor and lower walls and cream paint on the walls above 5'5" should be retained, because it dates back at least to 1935 and possibly as far back as Keeper Benton's time.

Fog Signal Furnishings		
Object and Location	Evidence	Recommendation
AIR DIAPHONE EQUIPMENT DIESEL ENGINES (2), 1 cylinder, 10 1/2 x 12 AIR COMPRESSORS (2), 8 x 6 Gardner Denver, Venn-Severin Machine Co. AIR RECEIVERS (2) FUEL TANK, 1805 gallons, 4'3" diameter, 17'0" length COOLING WATER TANK, 4'6" diameter, 5'0" height STARTING AIR TANK, 18" diameter, 6'0" height STARTING AIR COMPRESSOR, Curtis, 4 1/2 x 4 1/2 DIESEL ENGINE, Witte, 5 h.p. DUPLEX PUMP PIPING, as indicated DIAPHONE HORNS (2), mounted in dormer	1932 construction drawings, figures 34-37	Acquire the following period equipment:
HEATER (opposite north door)	Figure 34	Acquire period round heating stove, similar to Giant Cannon Coal Stove, in Sears, Roebuck catalog 130, 1915, p. 1109.
SWITCHBOARD, wood, painted gray, with gauges, switches and other electrical controls relating to 1941 electrical system (east side of chimney)	Original panel and controls (1941) in place, with manufacturer's label: Laganke Electric Co., Cleveland, Ohio (fig. 40)	Retain in place; clean but do not paint over existing finish
BATTERY BANK, 54 Exide batteries (east wall, north-east corner)	Original batteries (1941) in place (fig. 41)	Conserve and retain
SHELVING, steel, painted gray (east wall, northeast corner)	Original (1941) shelving in place	Retain original shelving
CUPBOARD, wood, painted gray (mounted on east wall, south of window)	Original in place, possibly dating from 1903, 1925, or 1933 (fig. 42; Evidence section, pp. 75, 78).	Retain, with original finish.
WORK BENCH, wood, painted gray (east wall, southeast corner)	Original in place, dating from before 1933 (fig. 42; refinished and fixed, station journal, June 20, 22, 1933)	Retain; clean but retain existing original finish
GENERATOR, KOHLER (south side, east of door)	Original (1946) in place (fig. 43)	Conserve and retain in place
SOCKET WRENCHES (5) (on work bench)	Found on Raspberry Island	Display original wrenches (APIS 36-40) on or above work bench, if they can be adequately secured
OTHER TOOLS (on work bench or hanging above it)		Use the following tools found at other Apostle Islands sites:

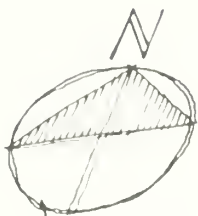
Fog Signal Furnishings		
Object and Location	Evidence	Recommendation
TOOL CHEST, Rocky Island (APIS 131) BOX WRENCH, Michigan Island (APIS 730) HACKSAW, Rocky Island (APIS 120) PLIERS, Sand Island (APIS 1405) CROW BAR, Rocky Island (APIS 162) SHOVEL, Rocky Island (APIS 182)		
CLEANING EQUIPMENT (on floor, east end, south side)	Numerous references in station journal to cleaning building after using the fog signal; Keeper's Annual Property Return, Split Rock, 1915	Acquire period articles or modern ones of similar style:
FLOOR BRUSHES (2) MOPS (2) PAILS (2), galvanized		
LIGHT FIXTURES	Figure 12 (Split Rock fog signal building, 1911); references in Raspberry Island station journal: "Polished lamps in fog signal" (Sept. 12, 1927), "hung Aladdin lamp in signal" (Oct. 7, 1933); existing electric ceiling lights probably installed in 1941	Retain electric fixtures dating from installation of electrical plant (1941)
CHAIRS (2, north side of chimney, near heater)	Station journal, June 8, 1929: "painted signal chaires"	Use original chair (APIS), painted gray, found in fog signal building, Raspberry Island. This is similar to No. 1K43 on p. 367 of Sears, Roebuck catalog 117, 1908; acquire similar chair, paint gray
LADDERS (2), extension, wood (hanging on east wall)	Station journal, May 10, 1906; property return, Split Rock, 1915	Acquire two wooden extension ladders; paint gray
STEPLADDER, wood (lean against south wall, east end)	Station journal, June 8, 1929; July 9, 1931; property return, Split Rock, 1915	Acquire wooden stepladder; paint gray
LAWNMOWER (outside west door)	Numerous references in station journal to using and repairing lawnmower; not in property returns, Split Rock, 1915, 1925	Acquire period reel-type lawnmower
LADDER, wood (on north side of roof, west end, next to fog whistle)	Station journal, Nov. 24, 1915: "making new ladder for signal roof"; not visible on south side in figure 3; cf. ladder on Devils Island fog signal, 1893 (Rathbun, "Light Stations," fig. 3.35)	Fabricate ladder

Fog Signal Furnishings		
Object and Location	Evidence	Recommendation
CISTERN COVER (outside, south of fog signal)	Figure 33	Fabricate wooden cover; paint gray

WORKING DRAWINGS

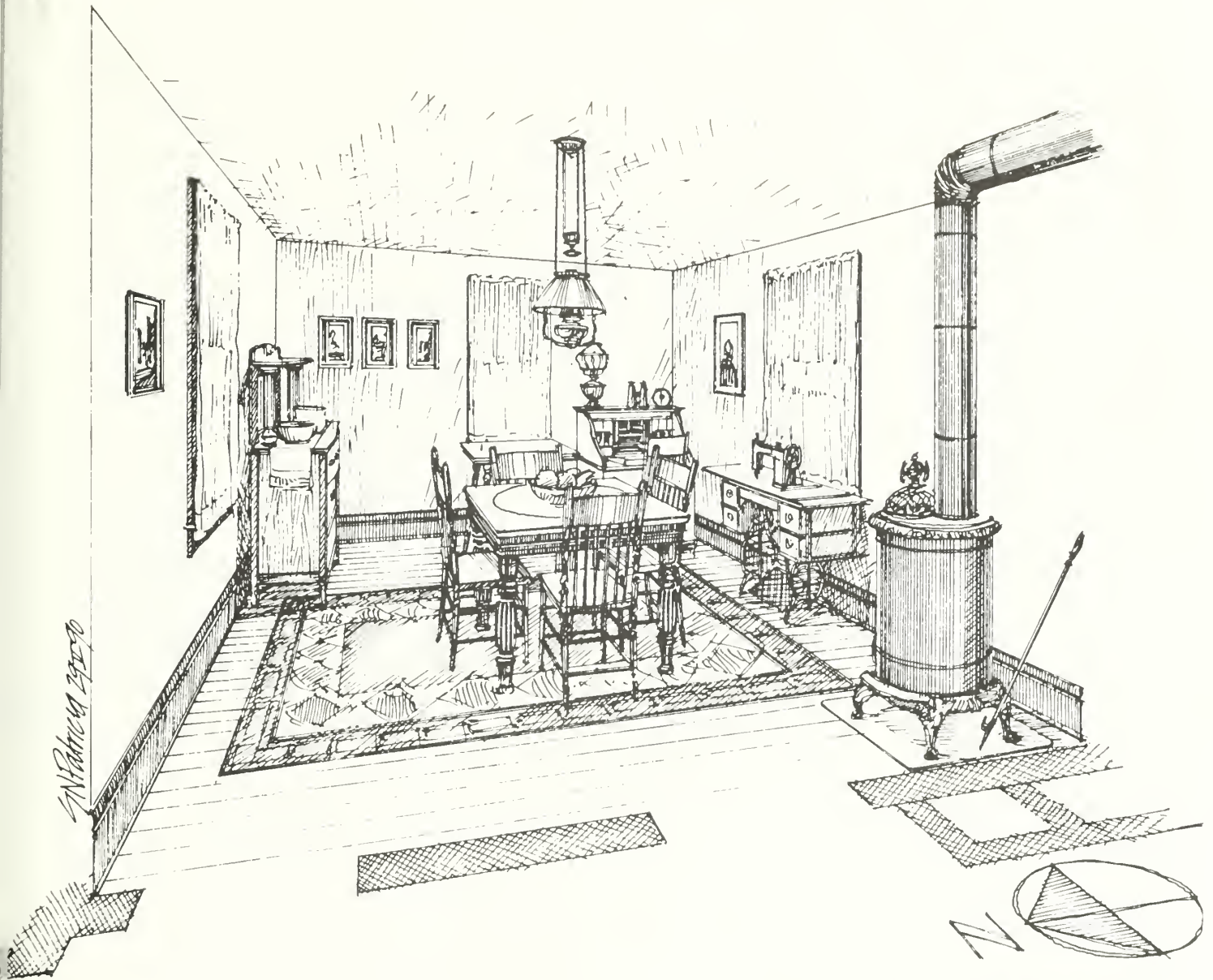


KITCHEN



GN Patricia 25/11/18

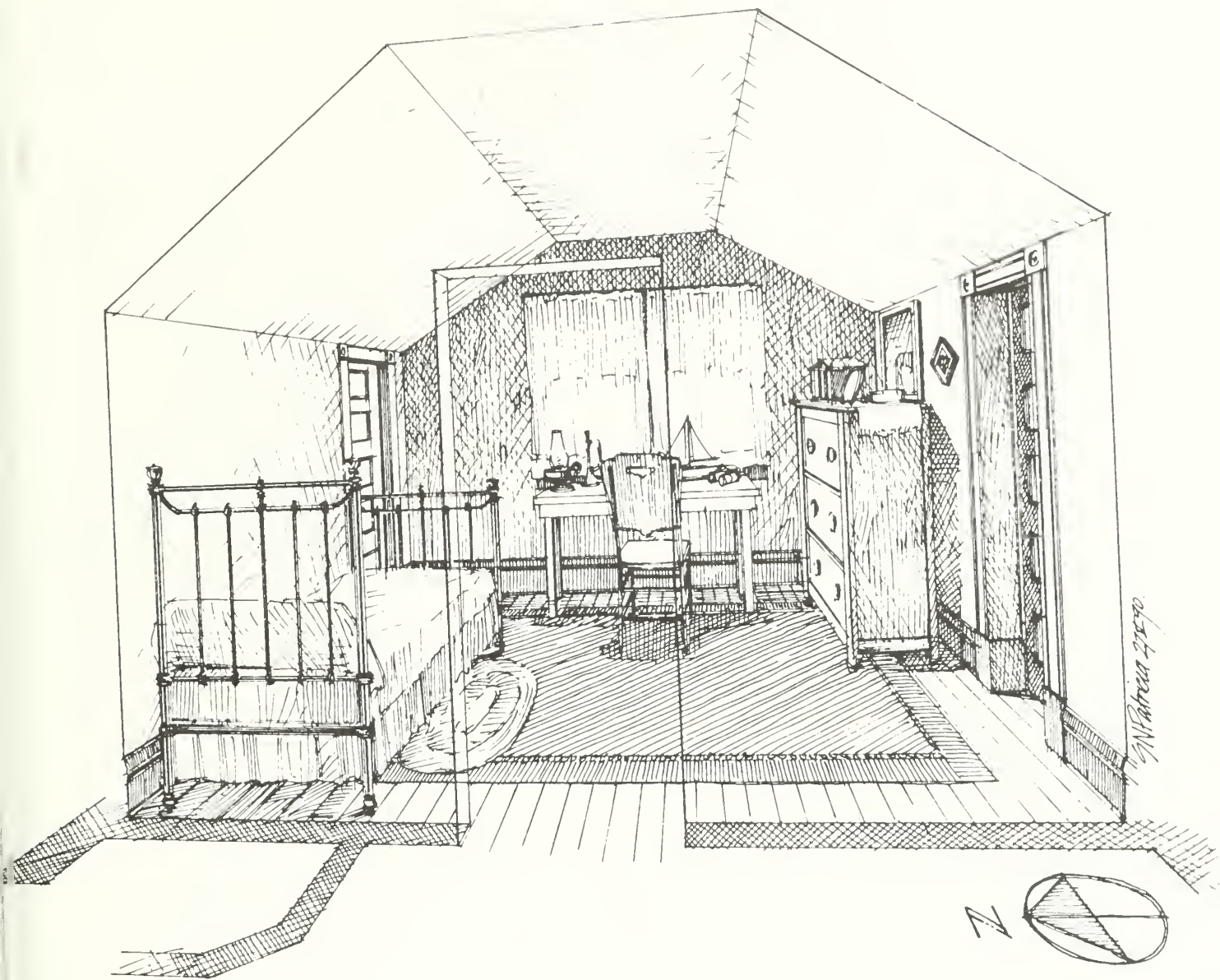
PANTRY



DINING ROOM



LIVING ROOM

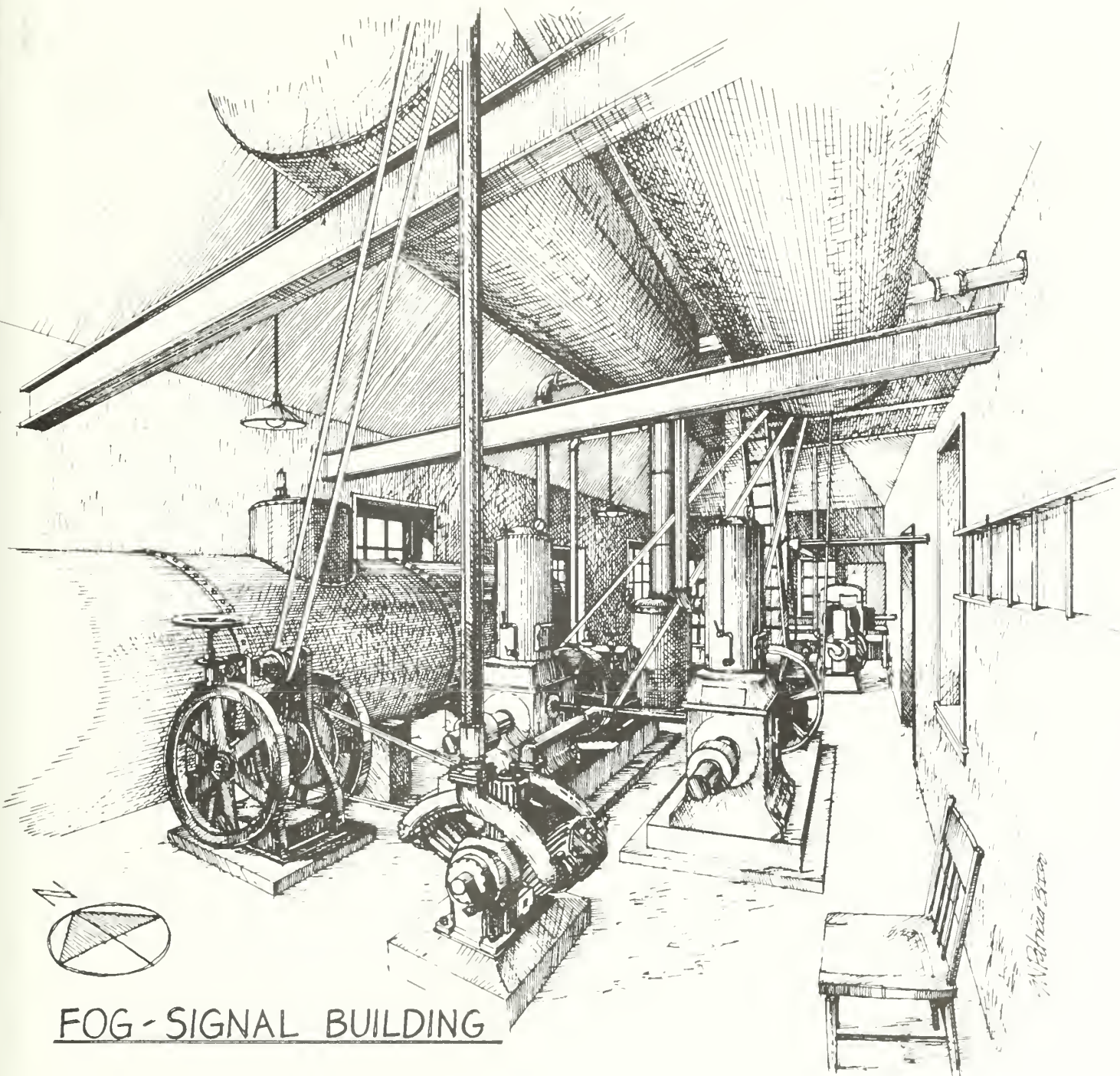


MIDDLE BEDROOM

6/1 Patricia 2/15/90



FRONT BEDROOM



FOG - SIGNAL BUILDING

W. H. Allen

N



FOG - SIGNAL BUILDING

BIBLIOGRAPHY

PRIMARY SOURCES

Interviews

- Barningham, Vernon. Interviewed by Marjorie Fisher Benton, n.d. Transcript, APIS. Subject served on Raspberry, Long, and Outer Islands (1930-48).
- Benton, Marjorie Fisher. Interviewed by David Wallace, David Snyder, and Diane Chalfant, June 8, 1989. Untranscribed tape, APIS. Subject married Harold Benton some years after the death of his father, Keeper Lee Benton of Raspberry Island, and has interviewed several of the lightkeepers and their children.
- Christensen, Elmer. Interviewed by Rathbun Associates, August 10, 1985. Untranscribed tape, APIS. Subject lived at Devils Island Light Station as a boy, 1925-34.
- Daniels, Walter, and Isabel Daniels Knapp. Interviewed by Marjorie Fisher Benton, n.d. Transcript, APIS. Subjects' father, Walter Daniels, served on Devils Island (ca. 1910-17) and Outer Island (1918-35).
- Durocher, Evelyn Lutz. Interviewed by Kate Lidfors, APIS, August 19, 1980. Transcript, APIS. Subject visited Raspberry Island in 1922.
- Erickson, Mel and Joyce. Interviewed by Kate Lidfors, APIS, March 2, 1982. Transcript, APIS. Subjects were resident caretakers on Raspberry Island, 1963-1975, when it was leased to The Ellerbee Company.
- Ethan, Christy McLean. Interviewed by David Snyder, APIS, July 19, 1989. Untranscribed tape, APIS. Subject's father was keeper on Devils Island (1898-1909) and Raspberry Island (1909-14; 2nd Ass't, 1914-16).
- Gustafson, Lorna. Interview, 1979. Notes from untranscribed tape, APIS. Subject's husband, Al Gustafson, was assistant at La Pointe (1939-48) and Devils Island (1948-?).
- _____. Interviewed by Charles Twining, Rathbun Associates, August 21, 1985. Untranscribed tape, APIS.

Hudak, Ben. Interviewed by Marjorie Fisher Benton, n.d. Partial transcript, APIS. Subject served at La Pointe Light (1929-35, 1937-63) and Outer Island (1936).

____. Interviewed by Roy Tull, July 24, 1979. Transcript, APIS.

Kirkendall, Grant W., and Romaine J. (Kirkendall) LaValley. Interviewed by Thomas Holden, Rathbun Associates, September 16, 1985. Untranscribed tape, APIS. Subjects' father, William Kirkendall, was 1st Assistant, Michigan Island, 1933-36.

Knapp, Isabel Daniels, see Daniels, Walter.

Parker, Robert E., Sr. Interviewed by Thomas Holden, Rathbun Associates, October 15, 1985. Untranscribed tape, APIS. Subject lived at Au Sable Light (1937-41), served in the Coast Guard from 1941 to 1961, and was stationed at La Pointe (1946-52), Outer Island (1953), and Two Harbors (1954); he also worked on lighthouse tenders in the late 1930s and 1950s.

Parker, Walter. Interviewed by Roy Tull, n.d. Transcript, APIS. Subject lived on Devils Island in 1919; worked on construction crews in the Apostle Islands (Michigan, 1927, Raspberry, 1932-33), served on lighthouse tenders (1933-56).

____. Interviewed by Kate Lidfors, April 8, 1982. Transcript, APIS.

____. Interviewed by Thomas Holden, Rathbun Associates, October 15, 1985. Untranscribed tape, APIS.

Platske, Frances Carpenter. Interviewed by David Snyder, APIS, July 7, 1989. Untranscribed tape, APIS. Subject's father was keeper on Outer Island (1935-41) and Raspberry Island (1941-43).

Sauer, Edna Lane. Interviewed by Kate Lidfors, APIS, May 1, 1982. Transcript, APIS. Subject's father was keeper on Michigan Island (1902-37).

____. Interviewed by Susan M. Monk, August 7, 1985. Transcript, APIS.

Spangle, Lois. Interviewed by Charles Twining, Rathbun Associates, August 14, 1985. Subject was 17 when her father, Al Gustafson, became 2nd assistant at La Pointe Light in 1939; she also lived on Devils Island.

Manuscripts

Bayfield, WI, Apostle Islands National Lakeshore. Postcard. Anna Benton to Mrs. G., Raspberry Island, July 1914 (APIS 2204).

____. Lee E. Benton to his son Harold, six letters from Raspberry Island, October 8, 1923-May 27, 1924 (APIS 477, 2035-2039).

____. Five documents relating to Benton's military and naval service, 1898-1922 (APIS 1423-1427).

____. Notebook, undated (APIS 388).

____. Abbie Kline to Lee E. and Bessie G. Benton, November 11, 1923 (APIS 2040).

____. Edward Lane to Lee E. Benton, Bayfield, Wisconsin, October 10, 1917 (APIS 204).

____. Lighthouse Service, Office of the Light House Engineer, 11th District. Construction drawings for "remodeling tower and dwelling" at Raspberry Island Light Station, October 30, 1905, with revisions to show "lighting and wiring added 1941"; re-issued as Drawing No. 633/80012, 3-25-80, by Planning and Resource Preservation Division, Midwest Regional Office, National Park Service. Copy, 7 sheets, APIS. See figures 20-23 of this report.

____. Office of Superintendent of Lighthouses, 11th District. Drawing 10911, Raspberry Island Light Station, Wis., Fog Signal Building Repairs, October 15, 1925. Copy, APIS 2004. See figures 30-31 of this report.

____. Office of Superintendent of Lighthouses, 11th District. Drawing 11641S, "Raspberry Island Light Station, Wis., Air Diaphone Fog Signal Installation," February 18, 1932, with revisions: 1939, 1941, 1946, 1947. Copy, APIS 2008. See figures 34 -37 of this report.

____. Invoice. Mantle Lamp Company of America to L E Benton, February 15, 1924, and 3 pages of advertising material (APIS 263).

____. Michigan Island Light Station, Wisconsin. Station Journal, 1926-1936 (APIS files).

____. Morong, Fred. "Brasswork, or The Lighthouse Keeper's Lament" (poem, copy at APIS).

- ____. Elna Olson to Kate Lidfors, November 24, 1987, with copy of poem by her mother, Anna Olson, 1906, entitled "The U.S.L.H.E." (APIS files).
 - ____. Edna Lane Sauer to Harold and Marjorie Benton, January 7, 1964 (APIS files).
 - ____. Edna Lane Sauer to Carol Grahm (four letters). Edna Lane Sauer to Marjorie Benton, 1987-88, (three letters re memories of the Apostle Islands (copies, APIS)).
 - ____. Thyra Seseman to Marjorie F. Benton, July 3, 1982 (copy, APIS files).
- Suitland, MD, National Archives. United States Light-House Service. Raspberry Island Light Station, Wisconsin. Station Journals, 1902-1939 (National Archives, Record Group 26).
- Two Harbors, MN, Split Rock Lighthouse. "Keeper's Annual Property Return and Annual Requisition and Receipt" (Form 30), July 10, 1915.
- ____. "Keeper's Annual Property Return and Receipt" (Form 30), August 18, 1925.
 - ____. Thompson, Harry W. Manuscript diary, 1913-1919.
- Washington, DC, National Archives, Record Group 26. United States Coast Guard. "History of Raspberry Island Light Station, Wisconsin, prepared by F.R. Eldridge, January 1951, one page typescript .
- ____. United States Light-House Service. "Clipping File—Raspberry Island Light Station."
 - ____. Letters to Engineers, 11th District, 1902-04.
 - ____. Light House Board Contracts, 1894-1903.
 - ____. Light House Board Correspondence, 1902-03, file 3655 and 1939, file 2749 B.
 - ____. Light House Board Journal, vol. 26, 1906.
 - ____. United States Light-House Service. "List of Field Service Positions, September 30, 1923" (File E 113, folder 5).
- Unlocated. A collection of 9th District Coast Guard records, which might contain information relating to Raspberry Island and other Apostle Islands lighthouses, was deposited by the Coast Guard in the Federal

Records Center, Chicago, Illinois, in 1959 (acc. 59-A-42). The entire accession was withdrawn in December 1985 by the Coast Guard and deposited in the Great Lakes and Northwestern Ohio Collection at Bowling Green University, Bowling Green, Ohio. The Great Lakes Collection was soon after moved to the Institute for Great Lakes Research, in Perrysburg, Ohio. Pending confirmation from the institute that the Coast Guard records are in their collection, no information on their contents is available.

Publications

Bayfield County Press, Bayfield, WI (May 19, September 29, December 1 and 8, 1932).

Bayfield Press, Bayfield, WI (May 7, 1920 (obituary, Anna Benton); August 24, 1923 (Grimm-Benton wedding announcement); November 12, 1924 (obituary, Lee Benton)).

Congoleum Co., Inc. Illustrated catalogs of Gold Seal Art-Rugs and Gold Seal Congoleum-by-the-yard, ca. 1922. TC 922-924, Harpers Ferry Center Library, Harpers Ferry, WV.

Edwards, Emory. *The American Steam Engineer, Theoretical and Practical....* Philadelphia: H.C.Baird, 1893.

Kozma, LuAnne Gaykowski, ed. *Living at a Lighthouse: Oral Histories from the Great Lakes*. Detroit, MI: Great Lakes Lighthouse Keepers Association, ca.1987.

Montgomery Ward & Co. *Catalogue No. 83*. New York: 1914. Harpers Ferry Center Library, Harpers Ferry, WV.

North Country News, Ashland, WI (January 16, 1975, p. 3: obituary of Harold Benton).

Putnam, George R. *Lighthouses and Lightships of the United States*, new and revised edition. Boston and New York: Houghton Mifflin Co., 1933.

____. *Sentinel of the Coasts: the Log of a Lighthouse Engineer*. New York: W.W.Norton & Co., ca.1937.

Sears, Roebuck & Co. *Catalogue 111*. Chicago, 1902, reprint.

____. *Catalogue 117*. Chicago, 1908, reprint.

- _____. *Catalogue 130*. Chicago, 1915. Harpers Ferry Center Library, Harpers Ferry, WV.
- Strelinger, Chas. A., & Co. *A Book of Tools, Machinery and Supplies*. Detroit, 1895. Harpers Ferry Center Library, Harpers Ferry, WV.
- U.S. Congress. Senate. *The Modern Light-House Service*, by Arnold Burges Johnson. 51st Cong., 1st sess., 1890. Executive Document No. 56.
- United States Department of Commerce. *21st Annual Report of the Secretary of Commerce 1933*, "Report of the Light House Service." Washington, DC: Government Printing Office, 1933.
- United States Department of the Treasury. *Report of the Light House Board, 1902-1904*. Washington, DC: Government Printing Office, 1902, 1903, 1904.
- United States Lighthouse Service. *Instructions to Employees of the United States Lighthouse Service 1915*. Washington: GPO, 1915.
- United States Light-House Board. *Instructions to Light-Keepers and Masters of Light-House Vessels. 1902*. Washington: GPO, 1902.
- _____. *Management of Lens Apparatus and Lamps*. Washington, DC, n.d. TC375/.U6/1800, Harpers Ferry Center Library, Harpers Ferry, WV.
- _____. *Price List of Standard Articles Furnished from General Depot, Tompkinsville, New York, 1901*. T25.2:P93, RG 287, National Archives.
- United States Light-House Establishment. *Light Keepers' Implements*, Vol. 4. RG 26, Cartographic Division, National Archives, Washington, D.C.

SECONDARY SOURCES

U.S. Government Unpublished Documents

- Department of the Interior, National Park Service. "Furnishing Plan, Point Loma Lighthouse, Cabrillo National Monument, San Diego, California," by Katherine B. Menz. Harpers Ferry, WV: Harpers Ferry Center, 1978 (draft).
- _____. "Historic Furnishings Report, Little Kinnakeet Life-Saving Station (1874-1915)/Coast Guard Station (1915-1954), Cape Hatteras National

Seashore, North Carolina," by David H. Wallace. Harpers Ferry, WV: Harpers Ferry Center, 1989 (draft).

—. "Historic Furnishings Survey, Great Lakes Lighthouses." Harpers Ferry, WV: Harpers Ferry Center, 1980.

—. "Interpretive Prospectus, Apostle Islands National Lakeshore, Wisconsin." Harpers Ferry, WV: Harpers Ferry Center, 1979.

Rathbun Associates. "Special History Study: Light Stations of the Apostle Islands National Lakeshore." February 1988. [Prepared for the National Park Service, Midwest Regional Office.]

Publications

Adamson, Hans Christian. *Keepers of the Lights*. New York: Greenberg, ca.1955.

Champney, Stella M. "Four Days of Terror," *The Detroit News* (May 17, 1931, Fiction-Feature Section, pp. 5, 10). This was the third article in a four-part series by Champney, entitled "Romance of the Lighthouse Service," that appeared in *The Detroit News* on May 10, 17, 24, and 31, 1931.

Manning, Gordon P. *Life in the Colchester Reef Lighthouse*. Shelburne, VT: The Shelburne Museum, c. 1958.

Noble, Dennis L., and T. Michael O'Brien. *Sentinels of the Rocks, from "Graveyard Coast" to National Lakeshore*. Marquette, MI: Northern Michigan University Press, 1979.

Otis, James. *The Light Keepers: a story of the United States Light-House Service*. New York: E.P. Dutton & Co., 1906.

Shanks, Ralph C., Jr., and Janetta Thompson Shanks. *Lighthouses of San Francisco Bay*. San Anselmo, CA: Costano Books, c.1976.

—. *Lighthouses and Lifeboats on the Redwood Coast*. San Anselmo, CA: Costano Books, c.1978.

"Shining Survivors," *Sunset, the magazine of western living* (February 1986, pp. 76-85).

Weiss, George. *The Lighthouse Service: Its History, Activities and Organization*. Institute for Government Research. Service Monographs of the United States, Government No. 40. Baltimore: The Johns Hopkins Press, 1926; 1974 reprint.

Whitney, Dudley. *The Lighthouse*. Boston: New York Graphic Society, c.1975.

ILLUSTRATIONS

Figure 1. Raspberry Island Light Station from the lake, 1920. Photograph courtesy U.S. Coast Guard.



Rocky Point - Del. - 1920

Figure 2. Raspberry Island Light Station, ca. 1906-45, plot plan. Adapted from Rathbun, "Light Stations of the Apostle Islands," fig. 5.6.

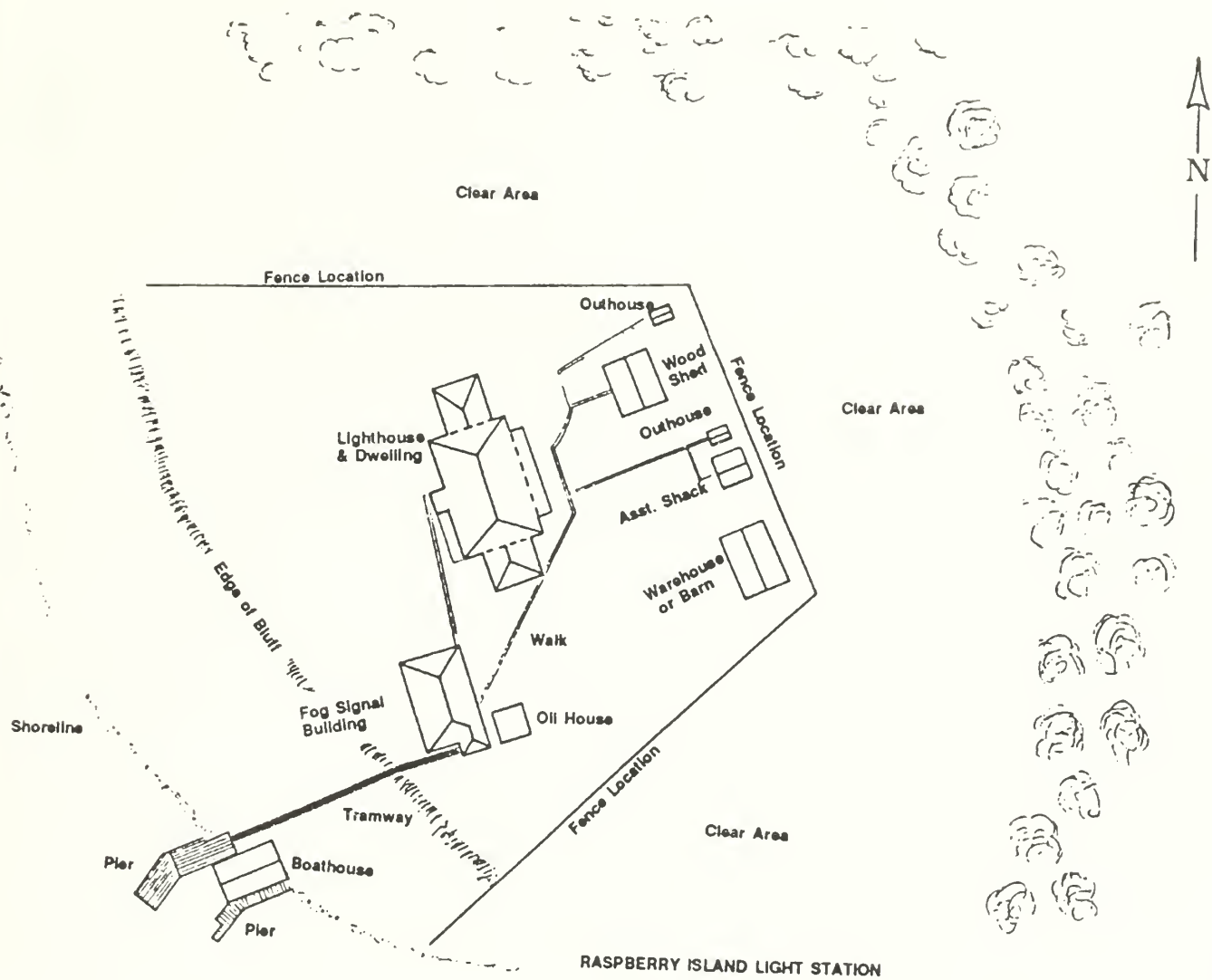


Figure 3. Raspberry Island, station building and fog signal building, 1922. Apostle Islands National Lakeshore (APIS) collection.

Figure 4. Raspberry Island Lighthouse from the east, Aug. 14, 1922. APIS collection.



Figure 5. Lee Benton, 1st assistant, Devils Island Light Station, Minnesota, washing clothes outside his quarters, 1912-14; a companion photograph, not illustrated, shows his wife at the same task using the same equipment. Photograph in Benton family album, APIS collection.

Figure 6. Family and friends of keeper McLean in front of the Raspberry Island fog signal building, 1912- 1914. Note boxed water line under window. APIS 657.



Figure 7. Anna Benton giving her visiting friend Mabel Eddy a wheelbarrow ride in front of the keeper's quarters, Raspberry Island, 1915 or 1916. APIS collection.

Figure 8. Two unidentified visitors in front of the assistants' quarters, ca. 1920. Note curtains in tower windows. APIS 2631.



Figure 9. Visitors Bessie Grimm (left) and Evelyn Lutz (right) on the keeper's front porch, Raspberry Island, July 27, 1922. From APIS copy of original in Evelyn Lutz Durocher collection.

Figure 10. Keeper Lee E. Benton, Raspberry Island Light Station, July 26, 1922. APIS collection.



Figure 11. Keeper Benton and Mabel Eddy on the front walk, Raspberry Island, 1915 or 1916. APIS collection.

Figure 12. First Assistant Lee Benton in the fog signal building at Split Rock Light Station, Minnesota, 1911, admiring the recently installed "Franklin Straight Line Gasoline Driven Air Compressors" that operated the station's fog sirens. Photograph (APIS 2254) in Benton family album, APIS collection.



Figure 13. Ship model made by Lee Benton for his second wife, 1923/24. Collection of Mrs. Harold (Marjorie F.) Benton, Bayfield, Wisconsin.

Figure 14. Bessie Grimm, Evelyn Lutz, and Lee Benton (?) play-acting on the lawn in front of the keeper's quarters, Raspberry Island, August 17, 1922. From APIS copy of original photograph in Evelyn Lutz Durocher collection.



Figure 15. Anna Klein Benton, outside her winter home in Bayfield, 1914-19. Photograph in Benton family album, APIS collection.



Figure 16. Mrs. Anna Benton holding baby Harold, born April 15, 1907. The photograph appears to have been taken from the parlor of the Benton's Bayfield apartment, looking into the dining room. APIS collection.



Figure 17. Lee and Harold Benton on the keeper's front porch, Raspberry Island, 1922. Harold was then 15 years old. Note camera on step below him. APIS collection.

Figure 18. Bess Grimm and Evelyn Lutz in the lantern of the lighthouse, Raspberry Island, July/August 1922. APIS 660.



Figure 19. Harold Benton, ca. 1922, with his marksmanship trophy. In the background are the assistant keepers' outhouse and a corner of the woodshed, Raspberry Island. APIS collection.

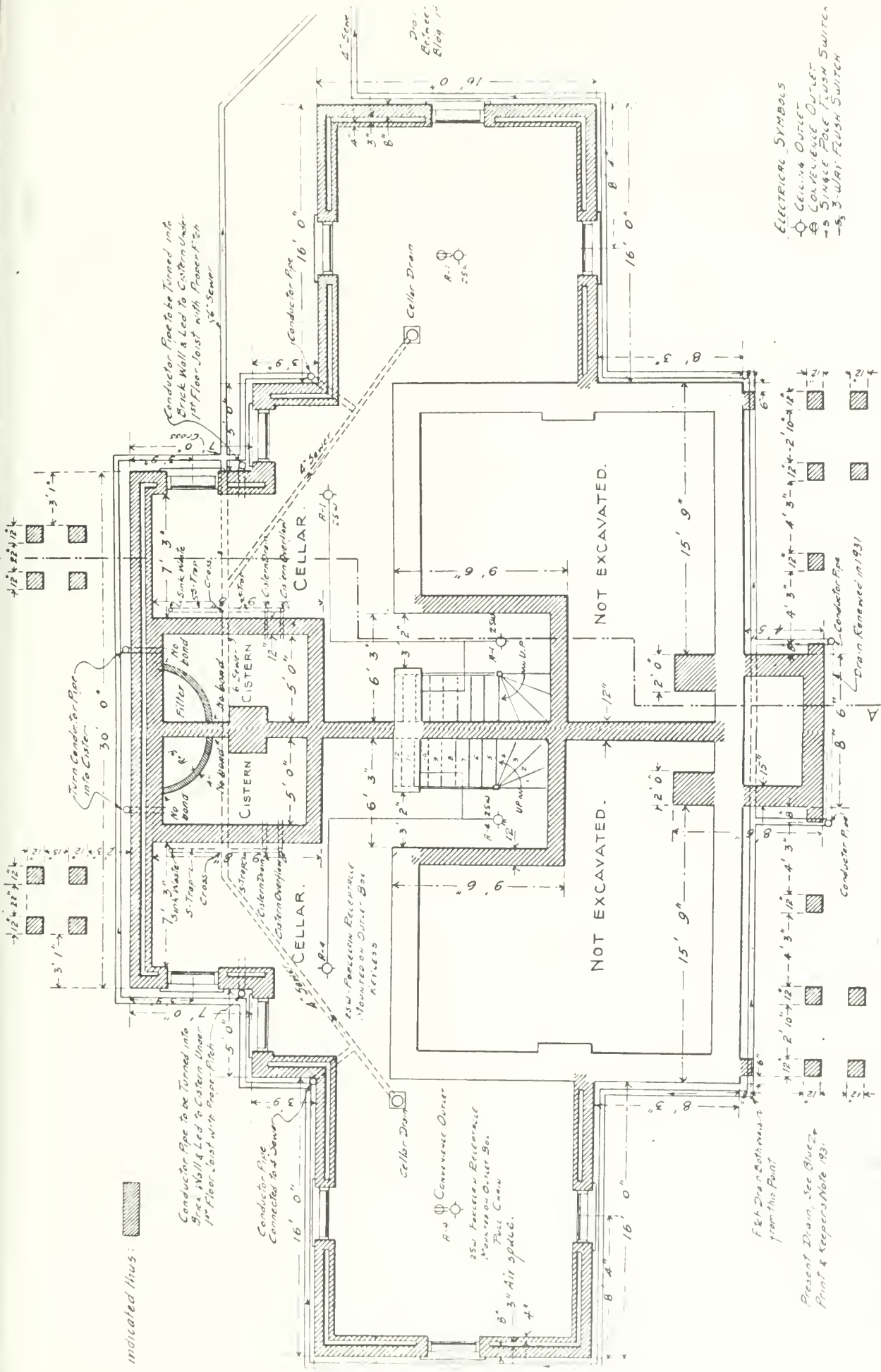


Figures 20-23.

Drawings for “remodeling tower and dwelling,” Raspberry Island Light Station, prepared in the office of the Light-House Engineer, 11th District, U.S. Light-House Service, Detroit, Michigan, October 30, 1905. The floor plans (figs. 20-22) were revised to show “lighting and wiring added 1941.” From copies issued as Drawing No. 633/80013, 3-25-80, Planning & Resource Preservation Division, Midwest Regional Office, National Park Service.

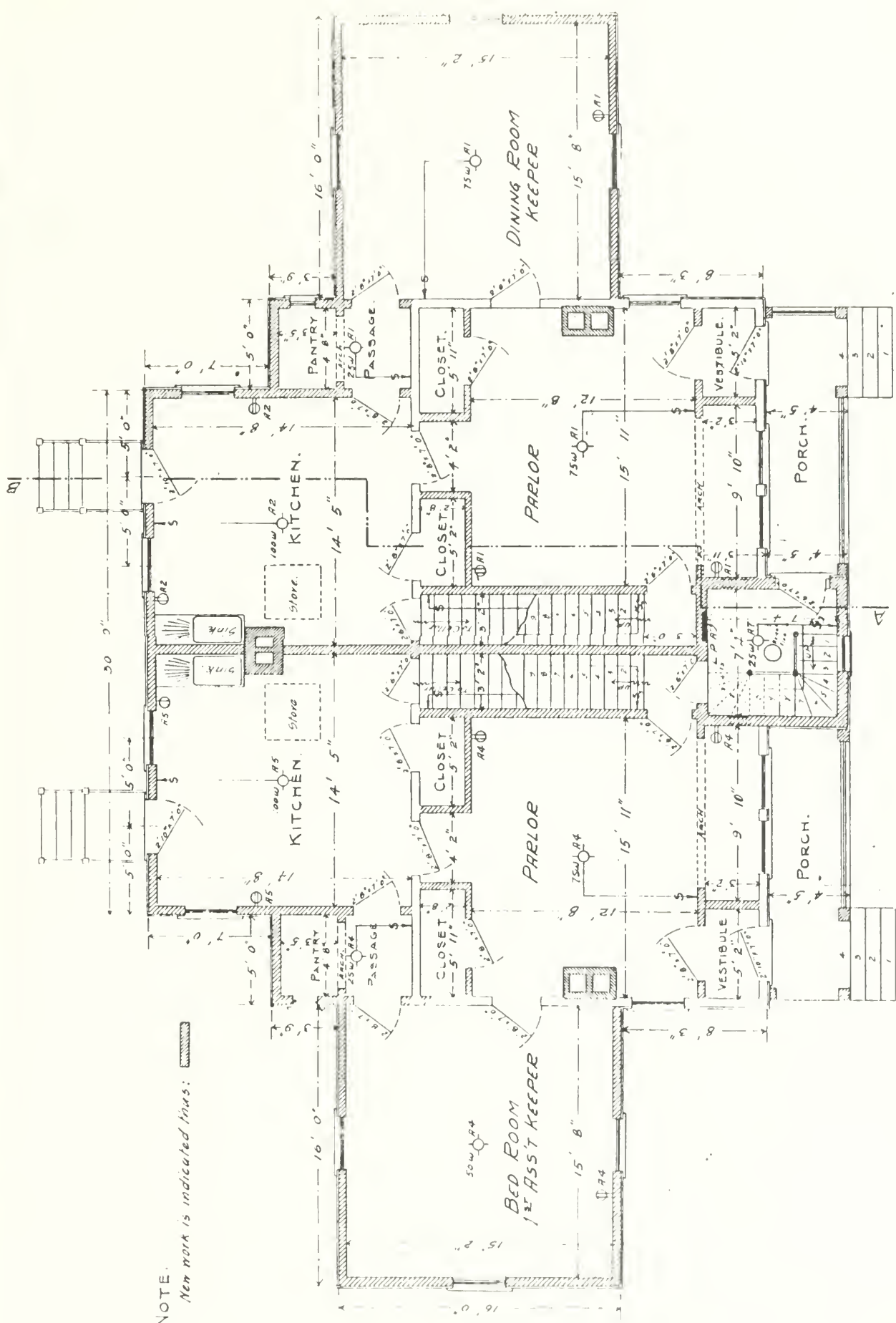
Figure 20. Foundation plan

Indicated Thus:



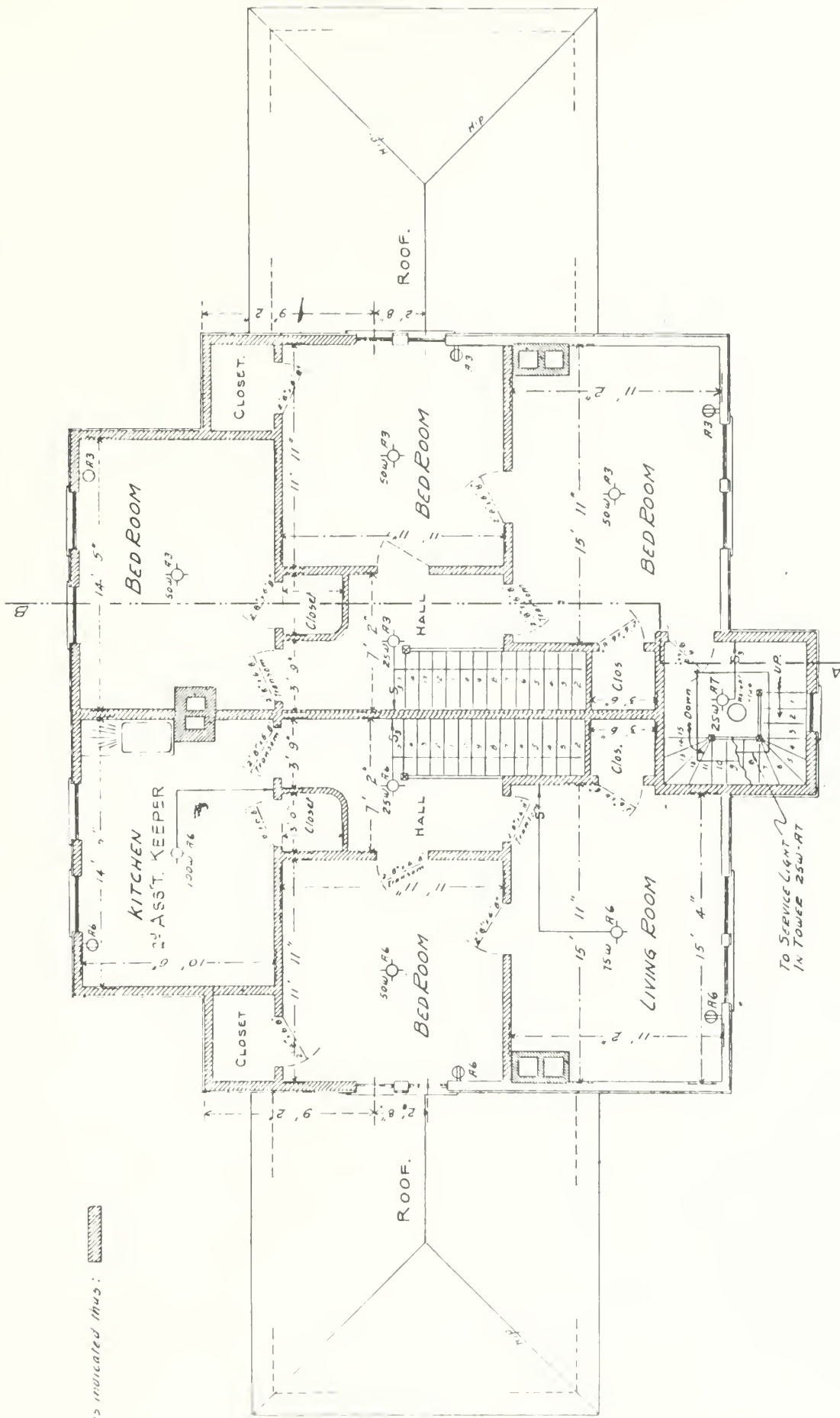
FOUNDATION PLAN.

Figure 21. First Floor Plan



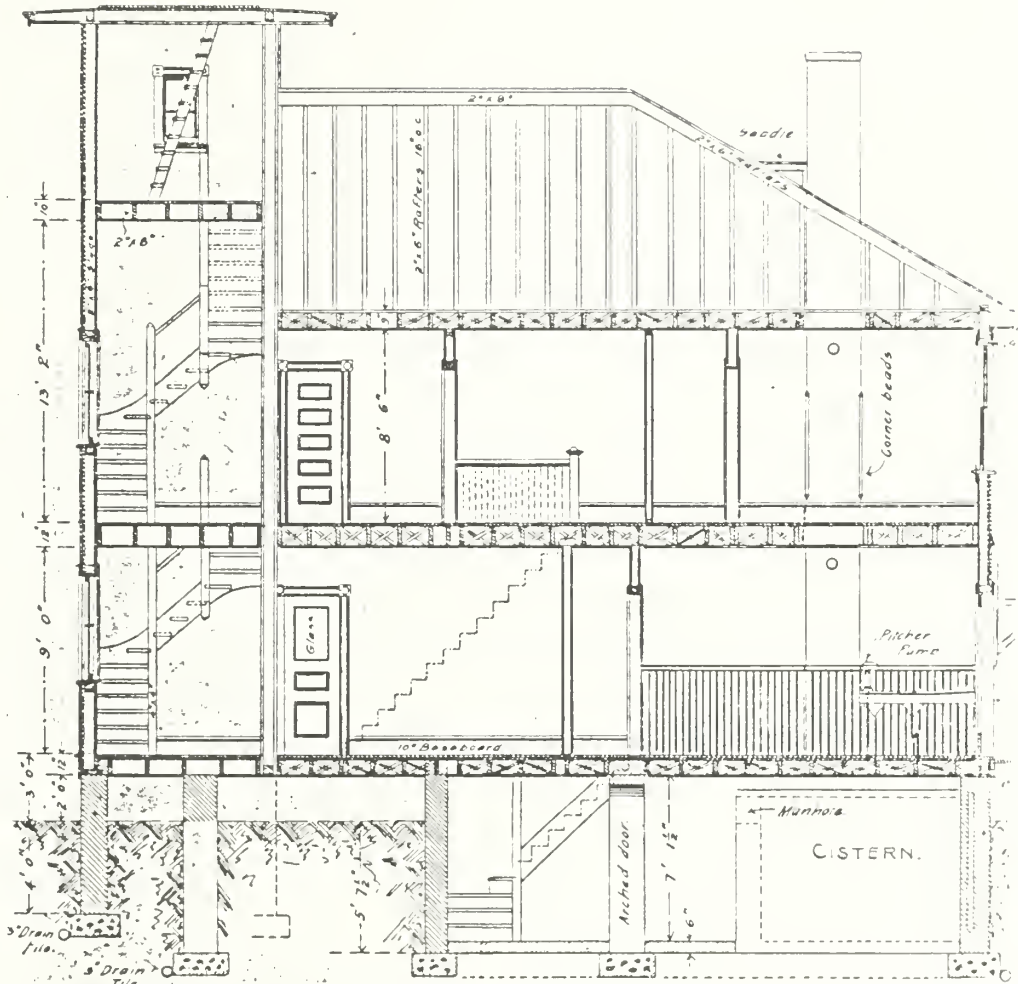
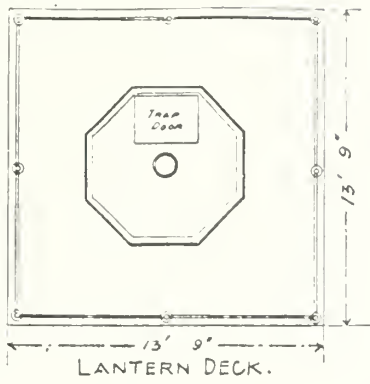
FIRST FLOOR PLAN

Figure 22. Second Floor Plan



SECOND FLOOR PLAN:

Figure 23. Section on Line A-B, showing kitchen and tower



SECTION ON LINE A-B.

Figure 24. Living room, Raspberry Island, about 1945, when Earl Seseman and his wife Thyra were in residence. Although Seseman was keeper at the time, the room configuration suggests that they were living in the 2nd assistant's quarters on the second floor. APIS collection, gift of Thyra Seseman.

Figure 25. Kitchen, Raspberry Island, about 1945. Note oil range and modern under-sink cabinets. APIS collection, gift of Thyra Seseman.



Figure 26. Evidence of stair treads on keeper's stairway and runner on hall floor, Raspberry Island. Photographed in June 1989 by the author.

Figure 27. Evidence of former floor covering in middle bedroom, keeper's quarters, Raspberry Island. Photographed in June 1989 by the author.

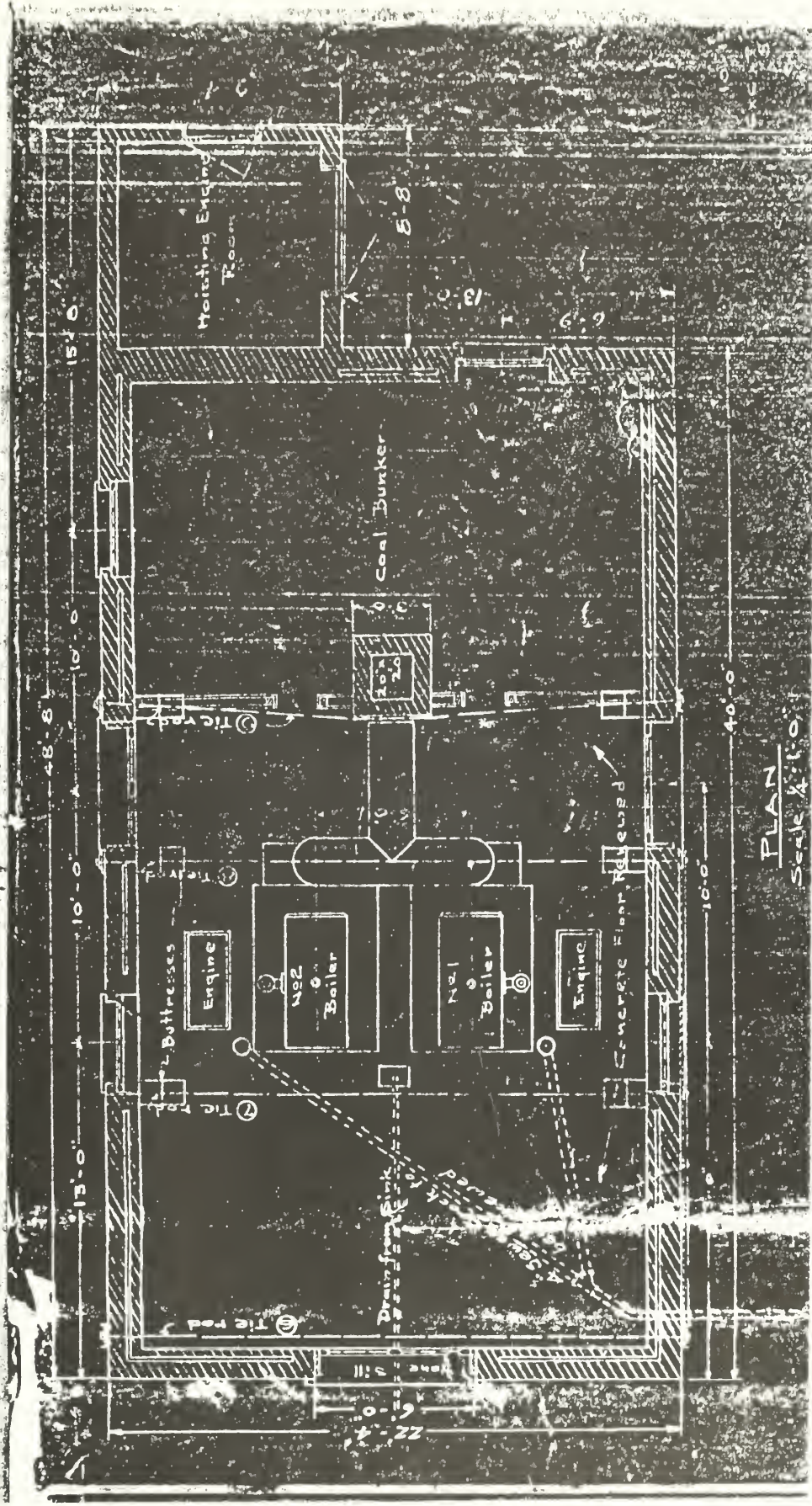


Figure 28. Fifth-order Fresnel lens with flash panels, used at Raspberry Island Light Station 1863-1947, as displayed in the State Historical Society of Wisconsin's Madeline Island Historical Museum.

Figure 29. The lantern, Raspberry Island Light Station, with curtains closed. From a photograph taken about 1920, APIS collection.



Figure 30. Plan from "Drawing 10911, Raspberry Island Light Station, Wis./Fog Signal Building Repairs," Office of Superintendent of Lighthouses, 11th District, Detroit, Michigan, October 15, 1925. From an original blueprint in APIS collection.



PLAN
Scale 1/4" = 1'-0"

Figure 31. Longitudinal Section, from "Drawing 10911, Raspberry Island Light Station, Wis./Fog Signal Building Repairs," Office of Superintendent of Lighthouses, 11th District, Detroit, Michigan, October 15, 1925. From an original blueprint in APIS collection.

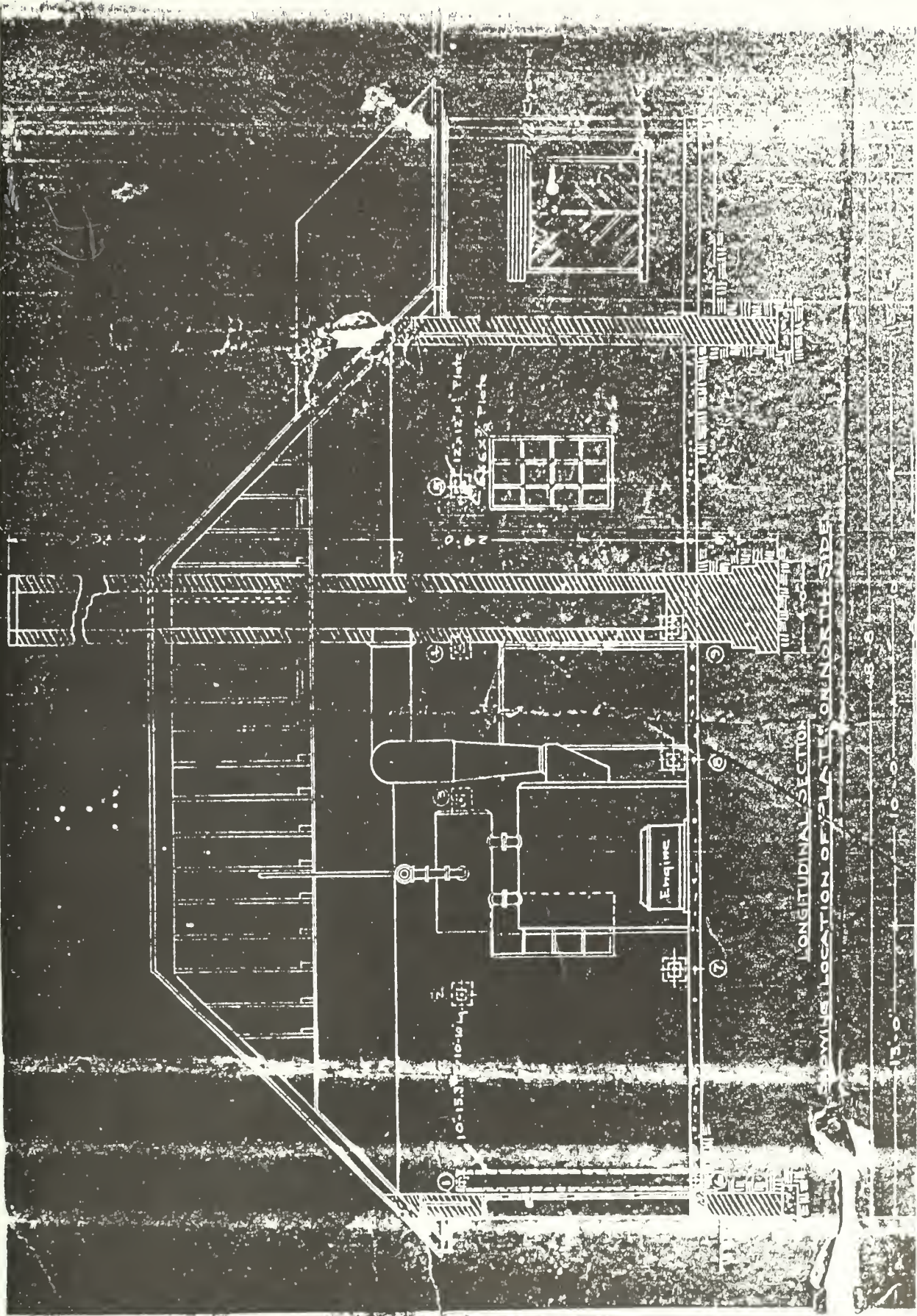


Figure 32. One of the boilers for the Raspberry Island fog signal building, with the installation crew, June 1903. APIS collection.

Figure 33. Fog signal cistern, pump, and water line, ca. 1922. APIS collection.



Figures 34-37.

Office of Superintendent of Lighthouses,
Eleventh District, Drawing 11641S,
"Raspberry Island Light Station Wis./Air
Diaphone Fog Signal Installation," ap-
proved February 18, 1932, and revised to
show radio installation (March 27, 1939),
electrification (April 1941), addition of fuel
tank and two Kohler generators (1946), and
introduction of CO₂. Fog Bell equipment
(August 8, 1947). From copy in APIS collec-
tion.

Figure 34. Floor Plan

Figure 35. Longitudinal Section, facing north

Figure 36. Cross section, facing west, and dormer elevation

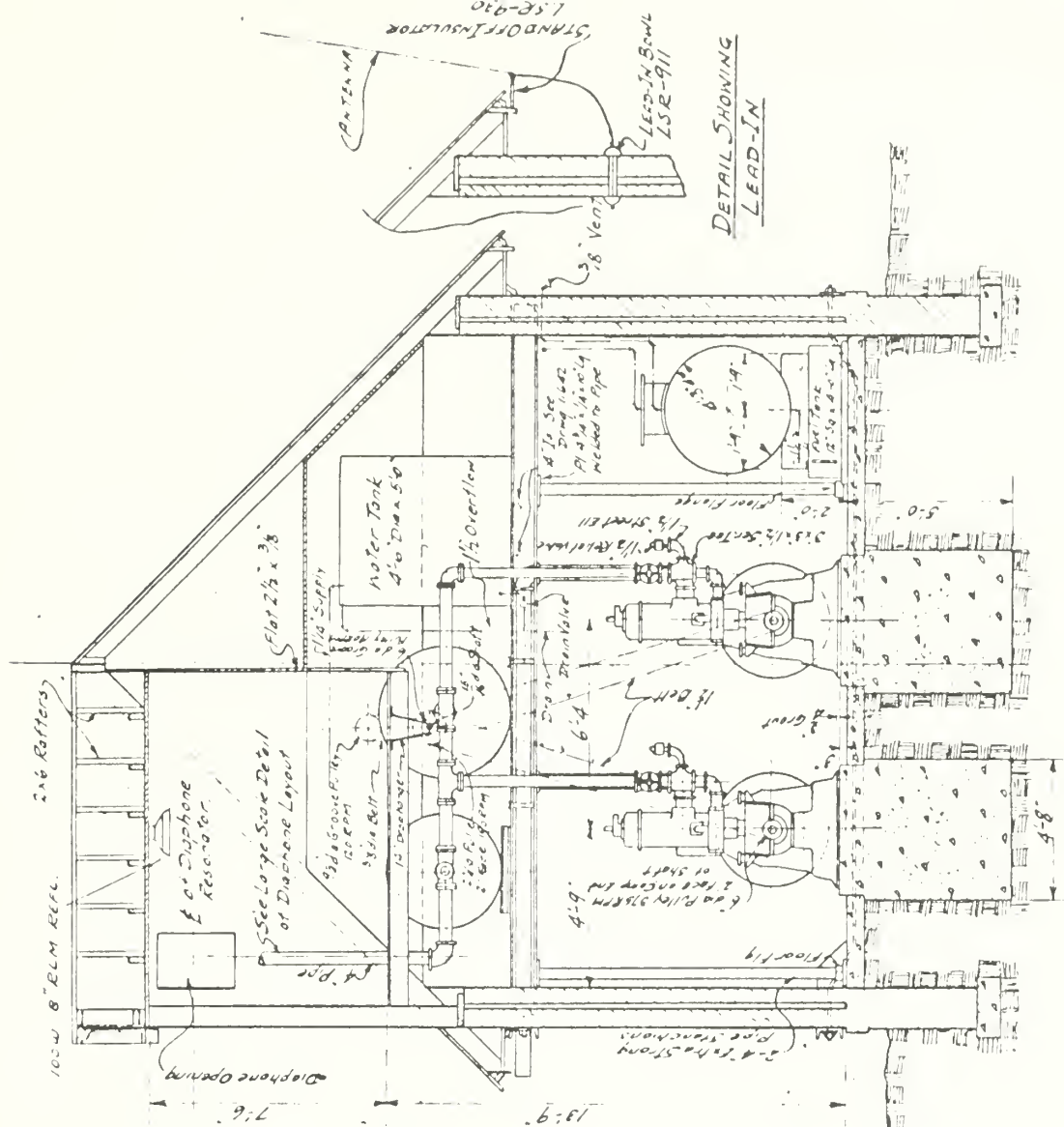
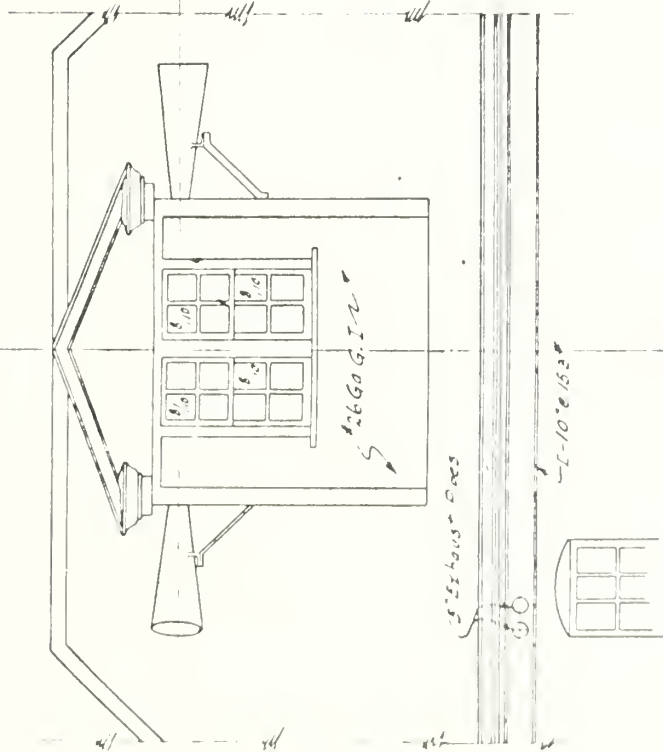
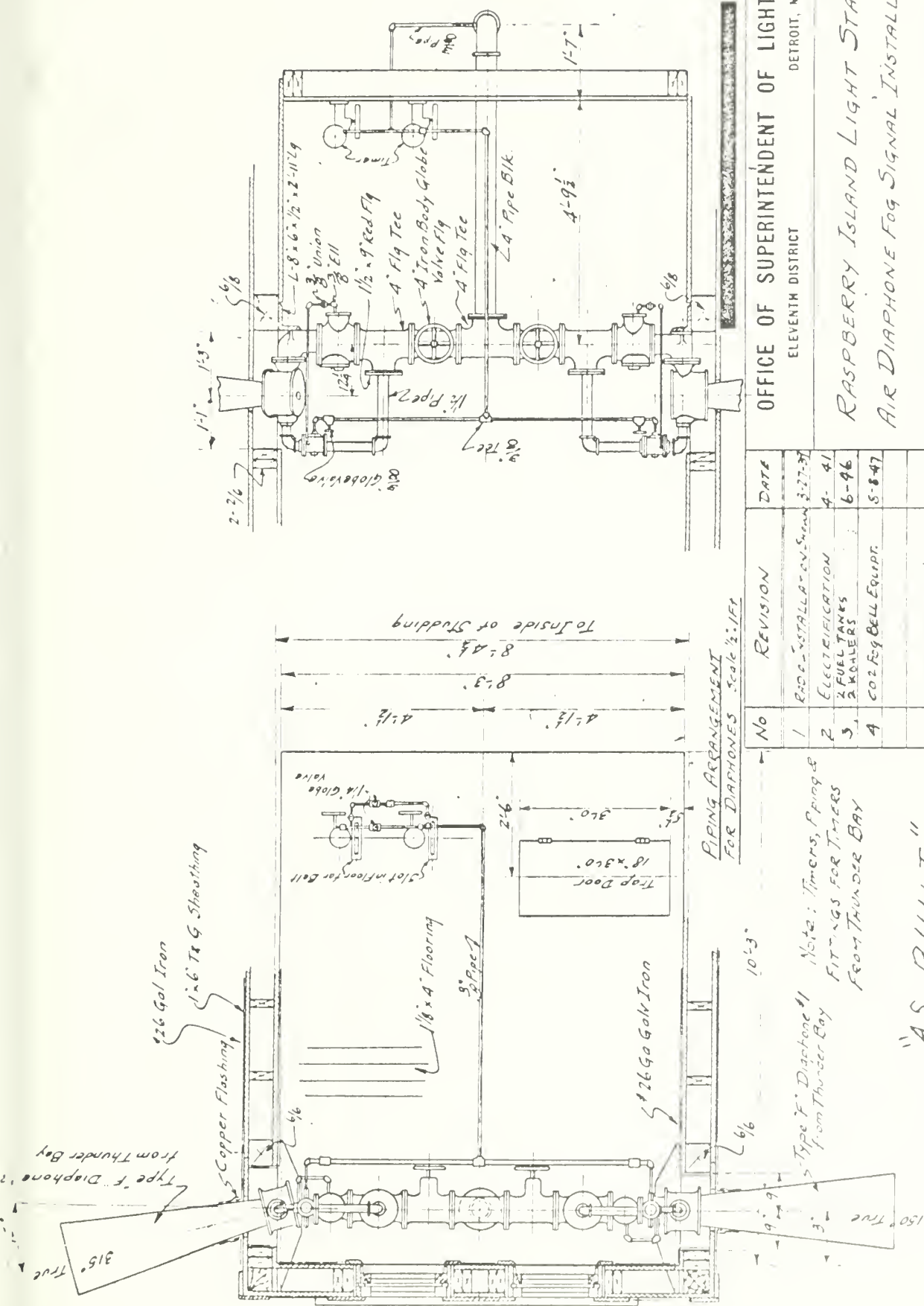


Figure 37. Piping arrangement for diaphones



No	REVISION	DATE
1	RECE-INSTALL-EX-SUM	3-27-37
2	ELECTRIFICATION	4- 41
3	FUEL TANKS	6-46
4	CO2 REG BELL EQUIP.	5-8-47

OFFICE OF SUPERINTENDENT OF LIGHTHOUSES
DETROIT, MICH.
ELEVENTH DISTRICT

RASPBERRY ISLAND LIGHT STATION WIS
AIR DIAPHONE FOG SIGNAL INSTALLATION

SCALE AS SHOWN
APPROVED 2-5-32
Charles B. Hill
SUPERINTENDENT
SENIOR L.H. ENGR
SHEET NO. OF
DR.G. 11641S
DRAWN *pk*
TRACED
CHECKED *W.B.*

Figure 38. Lighthouse Service crew installing air diaphone fog signal equipment, Raspberry Island, July 28, 1932. APIS collection.

Figure 39. Fog signal building, 1945, showing the steel plates installed in 1925 to straighten the south wall, and the dormer added in 1932 to house the air diaphone horns. Photograph by Keeper Earl Seseman (APIS 2653).



Figure 40. Switchboard for electrical system manufactured by Laganke Electric Company, Cleveland, Ohio, and installed in fog signal building, Raspberry Island, 1941. Photographed in June 1989 by the author.

Figure 41. East end of fog signal building, Raspberry Island, showing original chimney stack, ladder to diaphone platform (1932), battery bank (left, 1941), and electric lights (1941). Photographed in June 1989 by the author.



Figure 42. Pre-1932 cupboard and work bench, east end of fog signal building, Raspberry Island. Photographed in June 1989 by the author.

Figure 43. “Kohler of Kohler” generator, ca.1946, east end of fog signal building, Raspberry Island. Photographed in June 1989 by the author.

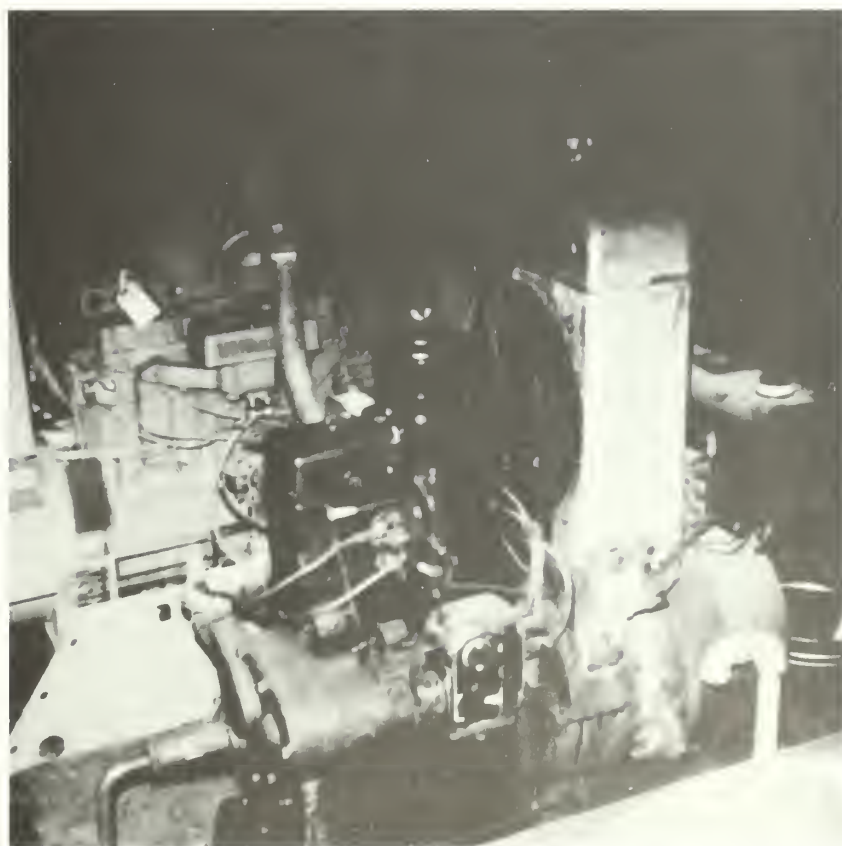


Figure 44. One of three chairs used by the Bentons on Raspberry Island. APIS 290, gift of Marjorie F. Benton.

Figure 45. One of three chairs used by the Bentons on Raspberry Island. APIS 311, gift of Marjorie F. Benton.



Figure 46. Berry set (bowl and six dishes) used on Raspberry Island by the Bentons. APIS 208, gift of Marjorie F. Benton.

Figure 47. Aladdin lamp used on Raspberry Island by the Bentons. APIS 221, gift of Marjorie F. Benton.



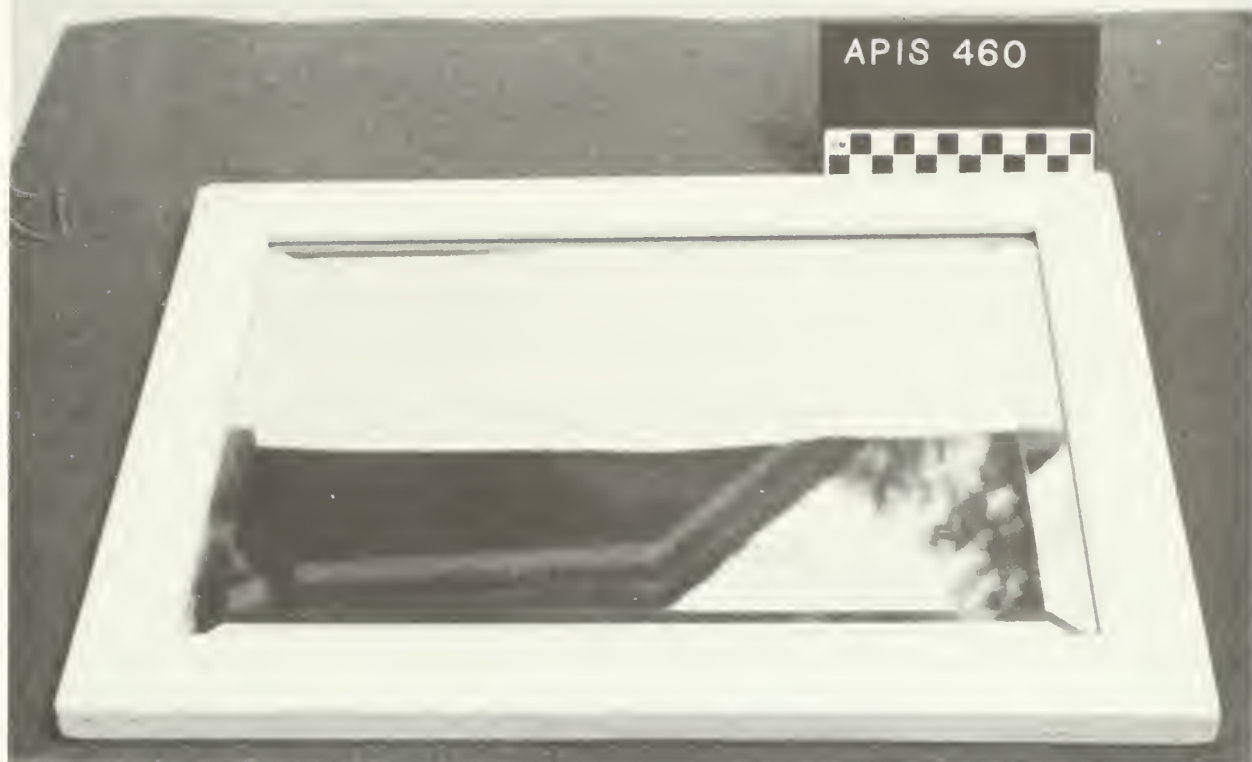
Figure 48. Edison Amberola VI phonograph, ca. 1913/14, owned by Keeper Benton of Raspberry Island. APIS 205, gift of Marjorie F. Benton.

Figure 49. Oriental-pattern rug possibly used on Raspberry Island by the Bentons. APIS #?, gift of Marjorie F. Benton.



Figure 50. Mirror used on Raspberry Island by the Bentons. APIS 460, gift of Marjorie F. Benton.

Figure 51. Washbowl used on Raspberry Island by the Bentons. APIS 220, gift of Marjorie F. Benton.



APPENDIXES

APPENDIX A

Benton family letters in Apostle Islands National Lakeshore collection:

Anna Benton to Mrs. G., Raspberry Island [July 1914] (APIS 2204)

Keeper Ed Lane (Michigan Island) to Keeper Lee Benton (Raspberry Island),
Bayfield, October 10, 1917 (APIS 2041)

Lee Benton to Harold Benton, Raspberry Island, October 6, 1923 (APIS 2036)

Lee Benton to Harold Benton, Raspberry Island, October 29, 1923
(APIS 2035)

Lee Benton to Harold Benton, Bayfield, November 15, 1923 (APIS 477)

Lee Benton to Harold Benton, Bayfield, April 16, 1924 (APIS 2039)

Lee Benton to Harold Benton, Raspberry Island, April 30, 1924 (APIS 2037)

Lee and Bess Benton to Harold Benton, Raspberry Island, May 27, 1924
(APIS 2038)

The evening here the evening of the 19th. of last month I
I suppose you folks heard from Redman that he
had been promoted. (The certainly had to leave them.
for they certainly would have to die if he got along the
the year or more that - did not with them. (2) Let me at
line when Mr. S. writes to be. Good - makes from all to
will

CONFERENCE HERE

MY MEAL AND ADDRESS: LIKE

Dear friend Mrs. S.

Dear friend Mrs. S.
No doubt - you have thought - that - I've
forgotten all about you folks but - such is not -
the case for we often speak of you & Halo - about
as far as we get - for we have been very neglectful
- but to everybody with visiting. I saw Mrs Redman
a letter but kept putting off from time to time. We are
all in the best - of health & hope this will find you all
the same. How are you all getting along? I suppose
the girls are growing. Harold is skin that - young. He
the girls are 4 & 4 1/2 years old. They are the 2nd & 3rd children. How



This is Raspberry Pt. our
 new home during the season
 of navigation & will make
 Bayfield our winter quarters
 again. Both sides of the house
 are alike. We live on the
 right side of the tower & the
 left side on the left. There are
 3 rooms down & 3 up & 4 big closets &
 2 pantries & a large cellar. The fog
 is done by.

Bayfield Wis

Oct 10, 1917

My Dear Friend

I rather dislike to write you this for fear of anguing you. But the time has come when I must ask you a serious question, the contemplation of which has caused me many sleepless nights & corresponding days of anxiety.

You will no doubt realize my reluctance in writing you in regards to a matter of so much importance to me for many

APIS 2041a

happy homes ^{II} and even whole
lives have been ruined by
similar troubles. still I feel that
you should know the worst at
once, for all sincerity it means
life & death to me. so in my
deep distress I appeal to you,
feeling that I can look to you
for the favor I am about to ask.
Although it may be asking
a great deal of you I
want you to lay aside
ordinary business and
devote your entire time
and attention to the
proper consideration of
my request. I recede
and sign my name

for fear some one other
than yourself will learn
of my difficulty. I ask
you out of the fullness of
your heart and in recog-
nition of your present
good friendship, as a man
of the world and as a friend
in need. I ask you to tell
me this, ~~do~~ you really
think or believe that Jeff
will ever be as tall as Mutt.

Your Friend
E. L.

(Ed Lane)

Raspberry Island.
Oct 8/23
My dear son.
Get up at 6-10 go to bed in
the evening so will sleep you a
few lines to night. - I am glad
to hear you are getting along
all right. - Pess said you
were down to the house while
she was over, we are having
a lot of smoke and you know
that means signal work
we are cutting shore woods
a little at a time and the-

APIS 20366
Pess says better son.
even with the from the
you can come over. Good night.
My kind of will let you know as
and some. Nothing certain and you in
You take care of yourself there
it is well, the much the more
if got a little for your head matter
not going to take in the that that
take your wish in this as I am.

signal work takes up a lot of the time, I have been cutting some wood for the house in town.

I sure have some job on my hands in town, I guess I will have to take all the plaster off the dining room, "I have it nearly all of that room gone" the living room and the hall will have to be done also and refastered some job

but we can do away with the wall paper there, I guess the Carpenter will have the Veranda finished by now if so I want to give it a coat of paint; last week I painted the veranda floor, I put the furnace up but haven't got the pipes for it yet. I wish you were in Bayfield this week - well I could give you a job every Saturday at the house I won't be able to

Raspberry Island

Oct 29/23

Dear Son,

I'm very sorry I couldn't go over to Richland last week when Bess went, - the work at the house had to be done and I just had to stay and do it, - our next trip.

So soon we will try and make it - on a Friday or Saturday so you can come over for the week end. How will that be son.

Bess tried very way by phone to get you but could not do so, the

Blacker started work
at the house Sat - Thursday
I tried to get everything
ready for him but - couldn't
They are going to take off
the Blacker in the hall and
sun and reflector them.
I have quite a lot of wood
in town now but not
as much as I would like
maybe I will get a chance
to take in another load
in the mule boat.

Did you know your
Cousin Harry is married
he was married about the

APIS 20356

list at Sept. Pass read in
the Superior paper that
that you had made the
club they had the
list of names there. I
sure am glad you made
it - for it will help
you out - in ways than
you think it will.

Saturday we hauled wood
around but - couldn't -
not - today it - is blowing
so hard, it - has been lying
hard to snow. the - dock
is covered with ice.

one more day and we
will have the wood around

that it won't take us long
to finish up with our work.

Bess wants to stay out-
here till the wind up.
Our orders are the same
as last year 5 to the 8th.
of Dec. Now Harold if
we can make our next
trip on a Friday or Saturday
I will phone you so you
can come over, if you do
bring your working clothes
I will ring off for now. Thanks
for the letter. Son and wife
say. With love from us
both - Dad + Bess

Hello Harold - Hope I'll see
you soon - B.

APIS 2035a

I should have said now
 a few things (and I will
 tell you is written
 I have not said in any
 of your letters and
 nothing in the ob-
 lisk you made it - I am
 sure you are getting
 very well - hope it
 is not of you - see and
 the (Perry) will be a very
 fine man - and I hope
 that he will find
 his share in it -
 but I hope

ALH 512

Dear Son,
 Received your welcome
 letter also the College paper.
 Many thanks for them. I wish
 we came to have that - but
 can't expect to go down
 the station tomorrow -
 the weather prevents - but
 the way it is tonight -
 it doesn't look as if we will.
 I would like to see you soon
 but - you know how it is
 with me now - every time

I come to town I tell us much, as I
can at the house, I have the -
down but it is not very much
yet - to put the casing back on
I have the furnace going now
just - got it in commission last
night - and it sure does throw
the heat, - to day Bess washed
all the windows in side and
out - down stairs also some
of the storm windows, I built
the storm house on the back porch
to day but I have the door to
hang yet - we have all our work
done at the station now so
we can take it easy, we have
our order for the Casing, the same
are fast of car - so if it is all
right on the 5th - will be in
Newfield on that date, I will
bring Bess in about the 25th
she expects to go a short time
then and stay with the mother

Bayfield Wis.

April 16/24

Dear Son,

We received your letter
Monday - glad to hear from
you. I have been working
pretty hard on the ground
but - it - is finished.
last - Friday I had a
man and team to level
off the ground and
yesterday I sowed it
in white clover, now
if it will only grow.

The ice is getting bad
and these last two days
will rot it so it
won't last long. I expect
some will get out next
week possibly the first
part of the week.

So you had better
come over Friday if you
can. Elva Dear expects
to be here then also
Love from us both
Dad + Mom.

Tracy, Cherry Island.
April 30/24.

My dear Son.

We are back to the old
home again and it sure
does feel good to be on the
job again. I did intend to
~~drop~~ you a line before we
came out - but - you see I
didn't - know till the morning
we came out - Sunday we
worked in the signal and
had to be at steam on our
return a few miles out -

APR 30 1924
We expect to go to home in
about three weeks if the weather is
good then so I can find - there
things - you need to get for me at
Coffman's I will send away for
the things before I go to Cape Cod
and to show the message from you
a piece over on Cape Cod thought this
thing to be worth to put it
down - if the weather is good -
well then good by for this time until
seen. Love from Dad and Mom.

and in a minute the signal was
full of steam and some water
there was sure some huddling
to full the fire then the water
glass broke. it seemed like every
thing went at once, the next day
we had to pump up the boiler
again by hand, but after that every
thing went fine, Monday the two
boys went over to Sand Island
to light the light - but found
it lit, - to day we done some
work on the motor boat and
went to the sand point - for the
row boat. - Bess has been cleaning
house and isnt finished yet -
she has been cleaning the wood work
and washing windows and putting
up curtains, she started the up
stairs to day, we havent any
outside painting to do this
year and that helps some

You ought to see Frolic bring in the
birds. She brought three today. I was
in fogs in about ten minutes. When
she brings them alive we make her let
them go. She says she is worth a good
deal - worth a dozen cats in fact.
Yiggs is the cutest little roly poly -
but he is never quiet. Just now he
must have gone to bed as only Frolic is here.
Lots of love from
Bess.

Yiggs is of the
the controlled
I guess asleep.
Bess he is in
mark.

Frolic's signature
in puddle
in sand
cherry
juice

Dear Har-
Lee from Raspberry Island. I go to
be in the morning I will
drop you a few lines. Our
have been doing some work
over the island - the one which has
been so bad. Could rain and
wind that - we haven't got
much done yet - but - when
we have - must be - at
this spring. no outside
fainting except - the road -

Raspberry Island.
May 27/24

We overhauled the Motor boat engine
and painted the boat, and yesterday
we cleaned the house. I have the
garden all spaded up and raked
but haven't done any planting
yet. Bess has been working at
the flower beds yesterday and
to-day. We tried to plow that
long strip next to the east-
fence but the horse wouldn't
or couldn't but I got a bar
of it broke up, we expect
go over to Highland from the 5th
in the motor boat that is if that
is the day Bess graduates.

Bess is going to add a few things now,
so take care of yourself son. Love from Dad.

Dear Harold -

We all send our best "Meow" and
a pun a two. We are good cats - but we do
catch a lot of birds - and we get spanked for that
we wonder why. Love from Frolic and Jiggs.
(Jiggs is the most mischievous rascal I ever seen - but he is a cat.)

Love to you
from Dad
and Bess

APPENDIX B

Obituary of Anna Klein Benton, *Bayfield Press*, May 7, 1920

MRS. ANNA J. BENTON PASSED AWAY FRIDAY

Scores of Bayfield people are mourning the death of Mrs. Anna J. Benton, wife of Mr. Lee Benton, which occurred at nine-thirty o'clock this forenoon at the family residence.

Mrs. Benton was a woman of delightful personality, a kind and loving wife and mother, whose presence in the home will be sorely missed by the husband and the young son Harold.

The body of deceased was taken to Cheboygan, Mich., accompanied by Mr. Benton and son, and Mr. Nicholas Klein, brother of Mrs. Benton. Funeral services will be held in Cheboygan Sunday.

Anna J. Klein was born in the Netherlands on November 18, 1879, coming to America with her parents when six months old. The family resided at Saginaw, Mich., later going to Cheboygan, where the aged father of the deceased, and a brother, still reside.

April 7th, 1906, deceased was united in marriage to Mr. Lee Benton and the couple came to Bayfield to reside that same year, Mr. Benton having received appointment as the keeper of the Raspberry Island light station.

Mrs. Benton had been ill for over a year past, suffering with tuberculosis, resulting from illness with influenza in December, 1918.

In July of last summer she went to Maple Crest Sanatorium at Whitelaw for treatment, but returned home in December.

Deceased was a member of the Rebekahs, the Royal Neighbors, the Yeoman and the Beavers.

The sympathy of all is extended to Mr. Benton and young son in their great sorrow.

Mr. Benton and son desire us to express for them their sincere gratitude for the many little kindnesses and assistance to them during the illness and death of Mrs. Benton.

Obituary of Lee Ellsworth Benton, *Bayfield Press*, November 12, 1924

LEE BENTON DIED DIED IN HOSPITAL

We learn this evening of the death at the Ashland General Hospital, at Ashland, of Mr. Lee Benton, for many years a well known resident of this community, and a member of the United States Lighthouse Service, stationed for a long time at the Raspberry Island Light Station, of which he was the keeper.

Mr. Benton, we understand, was taken suddenly and violently ill last Sunday while at the light station. He was rushed to the Ashland hospital where an examination showed him to be suffering with intestinal trouble demanding a hurried operation in an attempt to save his life. The operation was performed this Wednesday forenoon, but was unavailing, and Mr. Benton passed away this evening.

Funeral services will be held Friday morning at the residence on Nor. First Street at 9:30 o'clock and will be conducted by Rev. Carl F. Bruhn, of the First Presbyterian Church. The body will be shipped from this city to the former home of the deceased for interment.

The sudden death of Mr. Benton brings sorrow to many Bayfield people, for he was a splendid type of man, industrious and a good citizen, and mourning his demise he leaves the widow, and one young son by a former marriage, who is now attending Northland College at Ashland. Mrs. Benton was married to Mr. Benton about one year or so ago, and since then Mr. Benton has established a splendid home through purchase of the former Presbyterian parsonage property, where he had made many and extensive improvements.

Mrs. Benton is the daughter of Mr. and Mrs. P. H. Grimm, Second Street residents, who moved to this city recently from Ashland, Wis.

The community unites in expressions of sympathy for the sorrowing ones.

APPENDIX C

List of artifacts in Benton Collection, Apostle Islands National Lakeshore.

The donor, Mrs. Marjorie Fisher Benton, widow of Harold Benton, believes that these objects were used by the Bentons on Raspberry Island and in Bayfield between 1914 and 1924. They are arranged according to the rooms in which they seem most likely to have been used in the keeper's quarters on Raspberry Island.

	APIS #
Keeper's living room	
Edison Amberola VI (phonograph)	205
stand for phonograph	235
32 cylinder records, 23 tubes	203-204
Aladdin lamp, brass base, glass shade	221
kerosene lamp, glass	453
table runner, U.S.L.H.S.	231
box of dominoes	251-252
books: Victor Hugo (4)	254
book: <i>Fairyland of Science</i>	255
book: <i>Wood's Natural History</i>	256
book: <i>Dainty Work</i>	258
book: <i>Book of the U.S. Navy</i>	259
book: <i>Daily Comfort...</i>	332
books: encyclopedia	no #
postcard album	270
buttonhole scissors	272
needlecase	274
knitting needles	275
miniature slide projector	276
crochet hook	409
2 pieces of macrame	278
painting on shelf fungus	281
stereoscope	293
stereographs	301-310
photograph album	474
cribbage board	acc 219
pamphlet: "Important Light Towers"	acc 219
rug	acc 219?

Keeper's dining room	
bowl, rose pattern, D 23 cm	408
porcelain basket	219
napkin rings	acc 219
nutcracker and picks	253
bill spindle	271
binoculars	280
ashtray, glass	415
humidor	acc 219
pen (from ditty box)	acc 219
3 chairs	290, 293, 311
book: <i>Conklin's Vest Pocket Argument Settler</i>	260
book: <i>Blue Jacket's Manual</i> (1902)	329
book: <i>The Practical Gas Engineer</i> (1910)	330
book: <i>The Petty Officer's Drill Book</i> (1902)	331

Keeper's pantry	
6 dinner plates ("Brighton," Handley)	209, 319
4 salad plates	209
berry bowl and 6 saucers, rose pattern	208
berry saucer	209
sauceboat	209
fruit bowl, amethyst glass	211
egg cup, amethyst glass	212
berry saucer, clear glass	214
dinner plate, "Heather" (Edwards)	217
soup bowl "Derwood" (George)	218
toothpick holder, amethyst glass	213
sugar and creamer, Bavarian	216
6 knives and forks, plated (W.R., 1908)	232
carving knife and fork	236-237
sugar bowl, glass	339
sugar bowl, amethyst glass	414
glass jar, metal cover	423
small aluminum tray	acc 219
baby cup, Britannia Metal	334

Keeper's kitchen	
pie pan, granite ware	207
juicer, glass	215
3 three-tine forks, wood handles	233
paring knife	234
bread knife	238
mincer	239

skimmer, tin	240
nutmeg grater, tin	241
corkscrew	244
flour sifter, Bromwell (1930)	245
bread knife	406
stove brush	acc 219
apron, embroidered	acc 219
kitchen curtains, lawn	acc 219
rolling pin	acc 219
tongs (Bayfield only)	acc 219
ice pick (Bayfield only)	acc 219
Keeper's bedroom	
washbowl, "Verona"	220
<i>Holy Bible</i> (Anna Benton's)	257
shaving brush	283
trunk	291
photo of Lee Benton in naval uniform	322
2 toilet bottles	405
combs (2), Anna's	410, 411
hat pin, Anna's	412
pillow cover	2107
bedspread, white	acc 219
quilt	acc 219
blanket, patterned	acc 219
2 bolster covers, embroidered	acc 219
ditty box	acc 219
Harold's room	
pocket knife	242
toy boat	246
still bank	247
natural agates in pouch	248
bugle	249
140 clay marbles	250
duffle bag	261
fishing jig (spindle, twine, lure and hook)	268
binoculars	279
magnifying glass	282
photo of Lee Benton in rowboat, oval frame	333
blanket, army	acc 219

Tower		
watchbook (1931-33)		55
oil can/pitcher, U.S.L.H.E.		578
Fog signal building		
5 socket wrenches		36-40
chart showing fuel tank capacity (1940s?)		54
awl		321
screwdriver		407
skeleton key, fog signal (Russell & Erwin)		1408
parts list, "Kohler of Kohler" generator (1941)		1988-89
Uncertain location		
blueprint, repairs (1925)		2004
blueprint, air diaphone installation (1932)		2008
blueprint, electric lighting and wiring (1941)	2002-03,	2006
5 apothecary bottles		210
shipping box		262
rifle, .44 cal., Iver Johnson "Champion"		298
rifle, .25 cal., Quackenbush		299
revolver, .32 cal., Iver Johnson		300
doily, round		222
doily, round		228
doily, round		229
table mat, square		230
doily, round		316
6 Coleman Junior mantles		327
photograph: Lee Benton, 77 x 67 cm, frames		277
photograph: Lee Benton in Split Rock fog signal		325
photograph: Anna Benton, gilt frame		292
photograph: Anna Benton, father, and the Daniels		367
photograph: Anna Benton and Harold (1907)		338
photograph: Anna Benton		343
photograph: Anna, Lee, and Harold (with rifle and deer, Split Rock, 1910-12)		344
photograph: Harold, with goose		346
photograph: Lee, in Spanish-American War uniform		350
photograph: Harold as small child		357
photograph: Split Rock, Rock of Ages, and Devils Island Lights, 12.7 x 12.7 cm	353, 354,	356
photograph: Anna and Harold, 12.6 x 12.6 cm		358
photograph: Harold at Split Rock, 10.2 x 12.8		359
photograph: Harold skiing in Bayfield, 13.5 cm sq		363
photograph: Lee and friends, 16.1 x 10.8 cm		364

photograph: Harold, in Bayfield, 16.6 x 14.8 cm	368
photograph: Lee in naval uniform, 20.2 x 15.2 cm	369
photograph: Bessie Grimm, 9.8 x 3.2 cm	387
photograph: Devils Island, 34.5 x 42 cm, framed	1429
souvenir spoons (3)	417, 418, 420
small spoons (3)	416
small spoon	419
Aladdin lamp chimney and box	680, 682
Aladdin lamp wick, carrier, raiser, and box	685-687
hanging Kone Kap lamp and box (1911)	679, 683, 684
wooden towel ring	acc 219
brass curtain rings	acc 219
mirror, beveled glass	acc 219
green/gold glass piece	acc 219
pattern wheel	acc 219

APPENDIX D

Keeper's Annual Property Return and Receipt, submitted by Split Rock Light Station, Minnesota, August 18, 1925 (copy courtesy Split Rock Lighthouse, Minnesota Historical Society). Although Split Rock was a larger station than Raspberry Island and had a bigger light and different kind of fog signal, Raspberry Island Light Station would have kept on hand many of the same supplies, though in smaller quantities.

[illegible][illegible]

NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60 <td>61</td> <td>62</td> <td>63</td> <td>64</td> <td>65</td> <td>66</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>71</td> <td>72</td> <td>73</td> <td>74</td> <td>75</td> <td>76</td> <td>77</td> <td>78</td> <td>79</td> <td>80</td> <td>81</td> <td>82</td> <td>83</td> <td>84</td> <td>85</td> <td>86</td> <td>87</td> <td>88</td> <td>89</td> <td>90</td> <td>91</td> <td>92</td> <td>93</td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td>98</td> <td>99</td> <td>100</td>	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
NAME OF ARTICLE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51																																																	

NAME OF ARTICLE	On hand at last report	Received from other sources during year	Disposed of during year	On hand at close of year	Remarks and other pertinent information
LAMP FITTINGS—Continued.					
Deflection, oil					
Shades, glass lamp, 1	2				
Gas insulated lamp					
LAMP FITTINGS, VAPOR.					
Other type of lamp					
Other type of pump, 3 inch hp 1/2	2				
Other diameter of nipple in mm. 5/8	12	60	72	48	
Single or double tank? double					
Notes—Other and 1/2 inch nipple, then order of					
919 Flame sprayer	33		33	19	
927 Lamp nipple	93		93	60	
922 Lamp nipple	2		2	2	
926 Washer Cylindrical	4		4	10	
924 Washer Cylindrical	54		54	10	
925 Washer Cylindrical	4		4	10	
925 Washer Cylindrical	19		19	10	
6 ft. nipple	2		2	2	
6 ft. oil pipe nut	1		1	1	
6 ft. lamp stand nut	1		1	1	
6 ft. nipple	47		47	8	
934 Heat Retainers	2		2	2	
922 Lamp. Pump	8		8	4	
Vapor B. Wash	4		4	2	
934 Muzzle Head	1		1	1	
2 inch oil nipple					

I hereby certify that the foregoing returns are correct and that the expenditures thereon stated were actually made during the fiscal year ending June 30, 1911, and that the quantities shown in columns 5 are now on hand at this station, and that the expenditures made were necessary for the Lighthouse Service.

Date	Aug 18 th 1915	Name	C. D. Young
Section	Plant Book	Rating	Regular

CERTIFICATE B **FOR RECEIPT FOR TRANSFER OF PROPERTY**

I hereby certify that the above-named articles and quantities were received this day by me for use at this light station, and that they are of the condition named herein.

Date	_____	19__	Name _____
(Please Print Name)			

Station _____ Rating _____

I hereby certify that the foregoing articles were delivered and that three receipts therefor were prepared and secured.

Name (Please Print)
 Date Rating

[illegible]

APPENDIX E

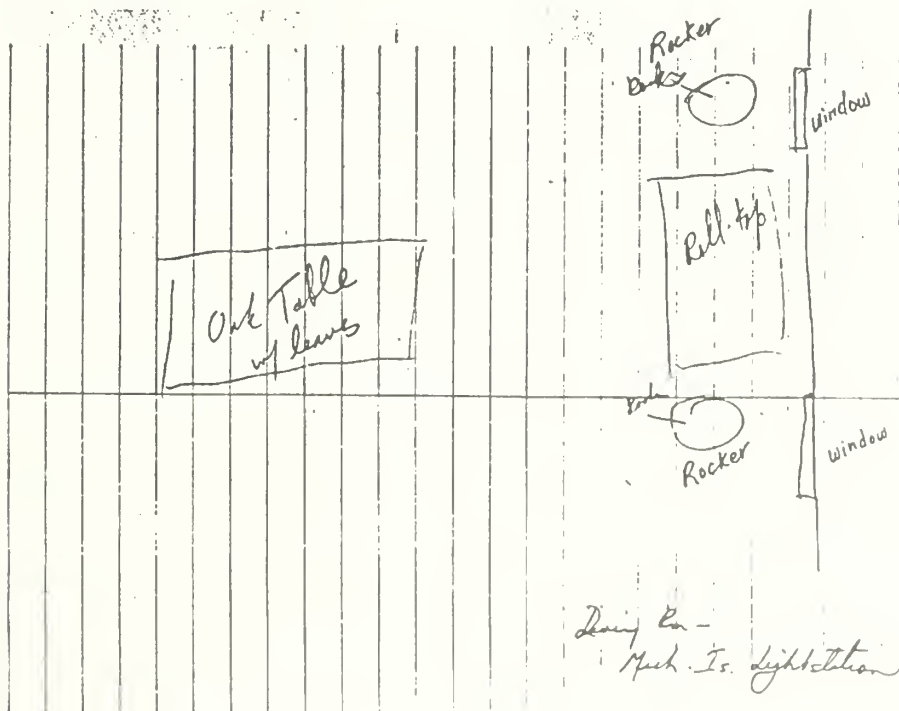
Furnishings in the keeper's quarters, Michigan Island Light Station, ca. 1905-1929, as recalled by Edna Lane Sauer, daughter of Keeper Ed Lane, in taped interviews with Kate Lidfors, 1982, and with Susan M. Monk, 1985 (APIS history files), and in letters to Marjorie F. Benton, 1987-88 (copies in APIS files).

Dining Room

1982 interview

...in the dining room we had...an oak table with leaves...and Dad had a beautiful desk that belonged to Mrs. Wilkenson's mother, I believe. She gave it to Dad. It was beautiful, with a roll top. There were two big windows like that, the desk stood between the windows, and there was a rocking chair on each side of the desk for Mother and Dad. And this over here was a stove in the winter and just a stand there otherwise. And this end here, there was a stand with a glass tray with glass pitcher and glasses that stood there.

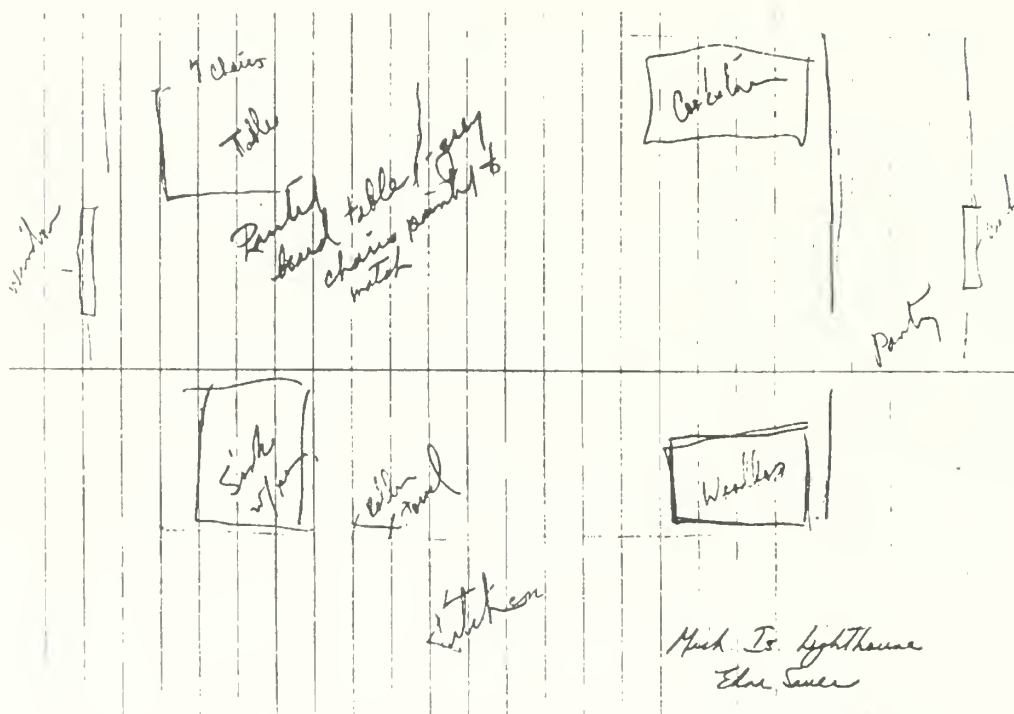
And then here was a door going into the closet; it was supposed to be all drugs, but that's where Dad kept his uniform too. And then there were two chairs here; well, there were chairs more than that for the table, you know, and that was all in the dining room.



Kitchen

1982 interview

You went down two steps from the dining room into the kitchen. And right here was the cookstove and a shelf behind the cookstove with the coffee can and a container and the tea in the square yellow box, you know, and the coffee grinder and things like that on the shelf. And here was a log [long?] table, big one up here, and then an assortment of chairs for the family. Had to have seven of them. There were two windows..., one at each end of this long kitchen.



Dad built a partition and made this into a pantry. He had shelves and drawers and then the flour we used to buy by the barrel, and he fixed it so it would swing out from under the counter. And then right in the kitchen, right opposite the cookstove, was a great big woodbox, and it was enamel, nice gray enamel, had a lid, you know, and we had to keep that filled. Over here, this end, here was the sink, old black iron sink with a pump, and then a tiny window there. And we had roller towel on the wall here. That's everything that was in that kitchen. But the woodbox, Dad used to sit on at night and put us kids through exercises. It was—you'd never take it for a woodbox.

[The family used the kitchen as their sitting room. It was also] where we had the bathtub, the round tub—[Q: the big galvanized—?] Yes.... You were only plopped only once—there were three of us to be plopped in that same water.

The only cookbook we ever had was a little Royal Baking Powder thing about that thick. That's the only cookbook we ever had in our house.

[The kitchen table was] just a board table, [painted grey or green. The chairs were also painted.]

1985 interview

The table was home made.... it was big enough for 8 people in the kitchen. [Her father partitioned off part of the kitchen for a pantry and put up shelves.]

September 1987, Edna Sauer to Marjorie Benton

...wood cookstove which meant going out in the woods when Fall arrived, cutting down birch trees for the summer's supply of firewood. Dad would cut the wood to stove-lengths and we children would pile it up for him. That HUGE wood-box in the kitchen had to be kept full at all times—what are little kids for but to carry the wood in.

November 1987, Edna Sauer to Marjorie Benton

That kitchen was really something! Dad boarded up one end to make a pantry. The huge woodbox stood in one corner—the wood-burning cookstove opposite it with a shelf above where the coffee mill, tea and coffee pots, canisters for Tea and Coffee which we had to grind each morning—sitting on the step between dining room and kitchen. One long table against the wall with seven chairs around it. ONE WINDOW. Black iron sink and pump in corner—towel rack (roller towels) on wall. That was it.

Food and Drink

1982 interview

[Had no fresh milk or meat,] because by the time you get it out there it kind of loses its flavor. But...the basement was as good as any refrigerator. We had a table down there, that's where we kept the butter and leftovers. Everything, it would just keep it beautifully.... Of course, Mother had a bread mixer, she had to make a lot of bread. [They used] canned milk, canned corn beef, stuff like that. We had a lot of fish...fresh fish. And Dad would smoke some. In the fall we had rabbit, always had rabbit—that was good eating, for us anyway. But we never had wild duck or anything like that. Dad didn't kill things. One year we had a number of chickens and two geese. Mother had a stock to [?] goose eggs. We never had chicken because Dad didn't kill anyway.... We had fresh eggs.... We had a nice vegetable garden...peas and salsify, string beans, lettuce, everything like that—beets. [Didn't think they had tomatoes until later years.] But we had a strawberry bed, tame strawberries. [Raised potatoes and onions, but no squash or turnips.] The only things she'd can was fruit, like your raspberries and strawberries. And she'd can huckleberries for pie in the winter. And cherries, she canned lots of cherries, and even made cherry pickles. She made raspberry shrub...like jelly.... You mix it with water for a drink.

[Her father made sand cherry wine;] it was just like port wine. [She remembered her father serving it in town when they had company;] they always served just a little tiny glass of wine and maybe a slice of poundcake or something like that.

[Mrs. Lane pickled fish on the island and Mr. Lane smoked fish in a little smokehouse. For breakfast they had oatmeal or cornmeal mush, pancakes and bacon. Her English mother made a lot of steamed puddings or raisin roly-polies, bread pudding with custard, Yorkshire pudding. For Christmas they usually had] mock duck...beef that you stuffed, had a pocket made and you filled it with dressing and roasted that.

December 1987, Edna Sauer to Marjorie Benton

“Mom always planted a vegetable and fruit garden in part of the meadow.”

March 1988, Edna Sauer to Marjorie Benton

Mom spent a lot of time canning wild strawberries, red raspberries, cherries, blueberries—not to mention all the jams and jellies.... THREE Crabapple trees and one pear tree in the meadow. Siberian crabs went to waste except for pickling and jelly....

August 1988, Edna Sauer to Marjorie Benton

“...blueberries...the yearly bushel we picked on Presque Isle every year. Mom would be up until midnight canning them.” Her mother made steamed puddings for dessert, with dried fruit. Her father made maple syrup.

Bedrooms

1982 interview

Since there were seven in the Lane family, “what would have been the living room had to be used as a bedroom. That was Mother and Dad’s, and off of that was just a small room that was a bedroom for my grandmother...”

* * *

The assistant keeper used a shack for cooking and eating, had one of the big bedrooms upstairs in the house. Keeper’s family had the other bedroom in which they had three double beds. “I can remember my sister and I would sleep at the head of the bed one night, my brother would have to sleep at the foot, and then we’d reverse. That was when we had company.”

* * *

She thought the beds upstairs were iron; her parents’ bed was oak and her grandmother’s was also wood. They had “mostly patchwork quilts,” some made by her mother, on the beds.

We had a dresser, and Dad used to take wooden boxes, I can’t describe them...and he would make a lid for them and hinge them, and Mother would

pad the top with cotton or something like that and this—they called it silkoline, it was a pretty, silky, flowered material, real fine flowers—and she would make a ruffle and gather that right down to the floor and cover the top...and that was to put in soiled clothing or anything like that. We had two of those up there, and then there was a washstand that Dad made for the towel and wash bowl and so forth.

* * *

There was a board...across two different spaces on the inside of the mirror with hooks—that's where we hung our clothes. There was one small clothes closet in that tiny bedroom downstairs, but no closet upstairs at all. [She indicated that there was a white china washbowl and pitcher.]

1985 interview

[Her father] would take wooden boxes—we called them cracker boxes...and make legs on them, and then Mom would use what we called silkoline—it was a flowered, real soft, silky material—and Mom would pad the covers for the boxes and she would ruffle the silkoline so it hid the legs. She made one of them for each of the bedrooms.

APPENDIX F

Furnishings in the keeper's quarters at Devils Island (1925-1934), Outer Island (1935-1941), and La Pointe Light Station, Long Island (1939). Extracts from taped interviews with Elmer Christensen, Frances Carpenter Platske, Ben Hudak, and Lois Gustafson Spangle (APIS history files).

Furnishings—Devils Island, ca. 1925-34, as remembered by Elmer Christensen (interview, 1985)

In the living room they had “just a regular table and chairs,” and a leather-covered reclining chair with rods in the back [Morris chair?]. The room was heated with “a large heater.... That was strictly coal, but of course it would have to be started with wood first.” He remembered the one at Eagle Harbor better. “That was one of those large ones and it had a lot of nickel plating on it and isinglass windows...and that usually burned anthracite.”

In the kitchen they had “an old wood stove” like the one at Raspberry in 1985, “with the reservoir on the one end for the water.” With the wood-and-coal stoves “you’d start a wood fire, then continue with the coal.” They had an icebox.

“Wasn’t much rugs as I recall.” Had a radio in the little room downstairs, off dining room; also at one time an Edison phonograph. Somewhere had “an ordinary...old style wall clock...wood. I think it was round, varnished like. There was a pendulum.” Backless bench on front porch. Kerosene lamps for light in house until house was wired when radio beacon was put in, about 1927. Had “ordinary fire extinguishers...water and soda type.”

Had both wooden and metal beds; had dresser in his room.

Station records were stored in a closet in the upstairs hall and in the attic.

In the basements were cisterns for collecting rain water from the roof. “That water we never used much, except like for washing and stuff.” Carried drinking water in pails on foot from the hole over cave where they brought water up in buckets by rope and pulley arrangement.

His mother did a lot of crocheting; he has given some samples to APIS.

His father made ship models and sold them in Bayfield in the winter. They also sold blueberries they picked on Devils Island.

Kitchen

Kitchen had a wood-burning range, pale green and yellow. There were cabinets on the back wall and a square oak table in front of the window. Her mother made curtains for the kitchen “by taking some material—I helped her—every inch of the material we pulled threads until we had a criss-cross design.” There was another table, porcelain-topped, with two chairs at it. The stove was across from the cabinets about halfway; it had a reservoir for water. Next to it, near the stairs, was the kitchen sink. Mrs. Carpenter ironed in the kitchen with flatirons. The kitchen “used to be the woodshed,” hence the steps up to the watch room. On the floor of the kitchen was “a full length, green pattern to it, linoleum.”

“Mother did a tremendous amount of baking and we had the old green cookie jars. We had peanut butter cookies.” Flour was kept in a flour bin; canned goods under the long cabinet.

Basement

In the first basement room there were two water tanks. In the second room was a “screened-in shelved cabinet where we kept our meat and our fresh foods. You couldn’t keep fresh foods very long because there was no such thing as an icebox, you’d keep them down in the basement and the boat would go in for supplies once a week.”

Watch Room

Next to the kitchen was the “watch room.... Dad had one of these huge oak desks right there...a roll top. That was there when we got there, that was there when the Daniels were there; it was left.” Outside there was a red-painted post with a mirror on top, tilted so you could see the tower light from inside the watch room. Going around the room from the right, there was a closet [interviewer noted that this was originally a pantry] in which they kept National Geographic magazines. “Every year when the lighthouse inspectors came, they’d bring boxes of books to read and there was always the National Geographic magazine, they would be old ones.” “And then right in the middle between—when you go out of the room over here into the hallway—right in the middle there was a government clock, and there was a

barometer, government barometer, always polished brass. There was no furniture here at all.” There were throw rugs in this room, on the hardwood floor.

“...on the right hand side of the steps [up from the kitchen] there was an oil burner, oil burning stove...not square, rectangular.” When they first arrived in 1935, Fran was cold and Emma Daniels sat her down by this stove with a tin measuring cup of warm condensed milk.

“This room was white, and there may have been wainscoting in this room.”

In the watch room, her father would “fill in the journal” every night, by the light of an Aladdin lamp. “I can remember seeing my dad sitting at that desk and seeing his shadow flickering in the light.” Has mentioned this in a poem she wrote.

Living Room

“This room, after Dad was there—I don’t here again remember what color, but I see a real light color; it must be a pale cream, but he had some stencils, he stencilled a design about 6 inches high all the way around the living room—this here—they call it living room here; I guess...parlor.” The stencilling was a square, geometric design.

That room was sparsely furnished; most rooms were. But here there was a long, long leather couch, padded...with a hobnail in it, a real long one. Of course, I was small then and maybe it wasn’t as long now if I looked at it. I remember sleeping on that one time.... And here there was—I doubt if it was a Wilson [Wilton?] rug, but it was an oriental type pattern in it and in the middle of the room—and this is what you’ll see in almost all lighthouses of that era—a library table, and inevitably it was made out of oak, had the two big pillars holding—and then it had kind of a scalloped, round legs underneath and a shelf on the bottom.... There was always the library table. And then there was also an oak—the rocking chair belonged to us—I don’t know how they ever got that out there. All this furniture had at one time been brought out there by the lighthouse tender Amaranth and then when one keeper would leave, then the other keeper would inherit that furniture—and add to it. But we added a rocking chair, if I’m not mistaken. [The library table was not used as a desk;] it was just there with a long, lace table cover; [didn’t think there was even a lamp on it.] I don’t remember how that room was lit. This room, I don’t believe was ever heated. There wasn’t any stove.... [There was a victrola] in the parlor, next to my mother’s bedroom. I never played it.

Pictures

One was Old Ironsides, the typical picture they had again of that era. There was always the one of the little girl looking up at the birds in the tree, and

there was the—OK, here's one that was a favorite in those days—what was the name of that Indian with his head bowed and he's on a horse and there's a sunset—"The Lone—" [The End of the Trail].

[Q: And you hung those up in the lighthouse?] Yes.... Those I'm quite sure belonged to our folks, [not passed on from the previous occupants of the house. They were not required to put up a photograph of President Roosevelt, and she didn't recall any photos of family or pictures of Washington and Lincoln.]

Bedrooms

The larger bedroom, about 11 x 9 feet, was her parents' room; she had the smaller about 9 x 8 feet, "out in the hall."

I had an old iron bed. And I don't know what kind of wood that dresser was made out of..., but it was painted a pale blue, a very low dresser with a long, high mirror, very plain.... That's all I remember being in that room.... I don't remember having any toys, come to think of it. I must have had something.

In her parents' room "there was just a big iron bed and one dresser and, yes, the closet's right there." Her mother's Bible was in this room.

"There was a little throw rug" in each bedroom.

Recreation

The Carpenters did not have a radio. They used to go up to the 1st assistant's quarters and listen to "The Shadow" on their Atwater Kent radio, with the lights out. They played cribbage and croquet; had no piano or other musical instruments.

Furnishings—Outer Island, ca. 1936, as remembered by Ben Hudak (interview by Roy Tull, ca. 1982)

Hudak recalled that the Outer Island kitchen, ca. 1936, had a coal or wood-burning stove, a sink, a table and chairs. The walls and furniture were painted: "We only had two colors, green and ivory color; that was standard." Heaters burned coal. The house lamps were Aladdin or "lighthouse lamps," brass. "Everything is brass. They made it so you'd have to polish it all. That's a sub light when one of your vapor lights were gone. You lit one of those lamps and put it inside the light."

Mr. Hudak had a couple of old lighthouse lamps that had been surveyed off. He also donated some things to the museum on Madeline Island, including a fog horn and a signal bell from La Pointe.

Furnishings—La Pointe (Long Island), 1939, as remembered by Lois (Gustafson) Spangle (interview, 1985)

In the old keepers' dwelling at La Pointe there was a desk where the keeper kept his log; also a big clock on the wall. They heated water for washing on a kerosene stove in the separate summer kitchen. In the new dwelling built in 1941 they had an electric stove and refrigerator in the kitchen, a washer and two laundry tubs in the basement, and an indoor bathroom.

APPENDIX G

Vernon Barningham and Walter Parker on lighthouse maintenance in the Apostle Islands in the 1930s. Extracts from interviews taped in the early 1980s (APIS history files).

Light Maintenance in the 1930s

Vernon Barningham, interviewed by Marjorie F. Benton, n.d.

He entered Light House Service at Thunder Bay, Alpena, MI; transferred to Long Island.

Then I went from Long Island over to Raspberry, then to Outer Island. The reason I was transferred was because I was changing the lights. We used to have heaters, gas, and these pre heaters had to be taken care of, boiled and everything. There was a lot of them didn't understand them because they were new and I did. I was sent there, all except Michigan. Michigan Island they had their light in and done away with the heater....

[Note: station log shows that Barningham's tour of duty at Raspberry began in April 1930 and that Raspberry got its Aladdin lamps in September 1931. Barningham served on Outer Island as 1st assistant, 1937-1941, and keeper, 1941-1948.]

That first one was a pre heater [probably Outer Island]. I think I can get you a copy of it. You see the lens were the only thing that moved; it went around. We used to wind them up by hand with weights. We'd wind that up and the heater was in shape like this. What was inside of that heater I don't know. This had a mantle on it. There here tank was down here and the pump was on this tank. This tank held the gas and this run up into here, through the pre heater and into here, the pressure. We had to fill this tank, carry the oil up the tower, fill the tank, then pump it up and get the pressure up. I had everyone go up at midnight that was on that watch. I took all day watches. I had them all to watch the light and they had to wind up at twelve o'clock. This here winding up you could run all the time till day light you know, in the summer time. We'd have about five feet left before it would stop. We had to make sure these lens didn't stop. This here had a outfit around here on the lens that turned the lens only. The lens come up here like this and the weights came down here like this and the winder was in here. The weight was on there and this was timed....if we were out of time we heard about it quick.... We had to time that every day to be sure we had the right time.

* * *

Q: Your tank for gas storage was down on the ground?

The tank was up in the tower, sitting by the light, the light up here and the tank down here. This is the door and the stairway came way down here.

Q: It's a long way down. You had a pipe that took the gas up. Did you have to carry the fuel up?

Here's where the fuel tank is and this is the pipe that takes the fuel up.

Q: To get it from the ground up did you have to carry the fuel up?

You carried it up and filled this up, up there by the light.... I think it was Raspberry Island, we'd have trouble with that pre heater up there. We'd take a Aladdin lamp and put her in there and I'd keep that thing agoing. I had a Aladdin lamp out to Raspberry Island.... They give a awful lot of light. To one of the boys I said, if you have trouble come in and get my lamp and we'd put that lamp up there, and see, you keep that light going. It was kind of a little bit dirty I guess and they went to the light in the mantle. That's the reason why I said you're going to have trouble. I boiled that thing in lye for two or three hours to get all that stuff out. That's the only way you could get it out of there. That was quite a dirty job, all that carbon in there, so that helped quite a bit.

Q: How often did you have to change the mantle?

We had the mantles by the box. If you were real careful with the mantle it would last quite a while. We never had much trouble with the mantle at all. If you touch by mistake or something like that....

We cleaned the lens quite a bit, twice a week. Polished the lens. Clean the lens and the prisms and keep that agoing.... Of course, we had to clean on the inside too. We took it out. If we were careful of it we could put it back in again.... Raspberry we had the same thing.

Walter Parker, interview, 1985

These old-time lighthouse keepers...brass, it wasn't just polish now and let it go for a month or two...it was polished regularly at least once a week; everything was gleam and polish...much more so than after the Coast Guard took over.

[For cleaning the lens] they used mostly ammonia, was a good cleaning fluid, especially with the old vaporizer kerosene—was a mantled—they called it the IOV type vaporizer system. They had to be pumped up every four hours so the air—in order to maintain pressure on the mantle-type lamps for vaporization through the vaporizers. They were pre-heated and then you got a much better expansion to your illumination to your light into the mantles, but on occasion they would fog up—the nozzles would become fogged up and then your lens would smoke up and everything would get black up in there, those beautiful lenses, and what a job that used to be to clean them then. [They used soap and water on the paint work.] On the glass they used mostly ammonia because it was a very good cleaning agent and would cut the grease of that smoke.... God, it used to be a mess.... They were like a Coleman lamp. [Nozzles used to clog up and have to be replaced at regular intervals, and cleaned after about 24 hours use.] It was a routine that had to be religiously adhered to or you were in trouble.

APPENDIX H

Extracts from the Raspberry Island station journal, 1904-39, relating to maintenance of the tower and light.

Raspberry Island, station journal, RG 26 Washington National Records Center, Suitland, Maryland

- | | | | |
|------|------|----|--|
| 1904 | May | 27 | "Cleaned the clockwork and clockcase" |
| | June | 1 | "Brighten brass in lamp room" |
| | | 22 | "draw a can of oil for lamp room" |
| 1906 | June | 22 | removed lens and clockwork from tower. "A lens lantern will be in use until the new tower is ready" |
| | | 28 | "The lens lantern was taken from tower and the lens returned but without clockwork or flash panels and so shows a steady white light" |
| | July | 4 | "The clockwork and flash panels have to day been put in order, so to night the characteristic of the light will be the same as before changed, a fifth order light, varied by a white flash every minute." |
| | Aug | 10 | "draw a can of oil for oilroom" |
| | Sept | 1 | "Cleaned plate glass windows in tower and put new wicks in lamps" |
| | Oct | 15 | "Painted the weight shaft in tower." |
| | Nov | 20 | "Draw can of oil for lamp room" |
| | Dec | 1 | "A strand of the clock cord broke at 9 pm, it was necessary to stop the clock for 10 min. to repair the cord." |
| 1907 | May | 18 | "oiled the floors & lower part of stairs in tower" |
| | | 20 | "oiled the uper [sic] stairs in tower" |
| | | 22 | "cleaned brass in lamp room" |
| | | 25 | "painted pedestal under lens" |
| | June | 3 | "painted the black part of tower" |
| | Aug | 1 | "put new wicks in tower lamp" |
| 1910 | June | 8 | "clock cord came of [sic] the puller that leads the clock cord" |
| | Sept | 9 | clock stopped at 3 a.m. and light stopped flashing, because 2nd asst. did not wind clock because the door to the tower from the asst's side was locked |
| | Oct | 31 | "At about 11 P.M. the keeper went in the tower to change lamps and wind the clock; in winding the clock the clock cable slipped of [sic] the pulley and while getting the cable in place the flash pans did not revolve for about 25 minutes." |
| 1911 | May | 2 | "Cleaned clock for revolving apparatus and oiled it, polished case, polished ventilators and other brass in tower." |
| | Sept | 2 | "filled oil can in tower" |
| | Oct | 25 | "put a new cable in the revolving apparatus, oiled and cleaned clock" |
| | Dec | 7 | "Keeper got up at 6:20 A.M., found the revolving apparatus still and the 1st assist. asleep on his kitchen floor on his watch" |

1912	May	8 "Burning paint in lantern and scraping it of [sic] the metal parts"
		9 "Painting inside of tower"
	June	5 "oiled and [sic] clock and clockcase"
1913	May	26 "varnished tower stairs"
	Nov	22 "painted watch room in assts part"
	Dec	8 "greased the bright work in the tower to prevent rust during the winter"
1914	May	26 "polished brass in the trimming room in tower"
1915	April	21 "Put new charriot wheels under lense"
	May	3 "washing walls in tower"
		13 "painting outside and inside of lantern"
		14 "assts polishing lense"
		19 "polishing brass in tower"
		28 "cleaning bright-work tower"
	June	1 "scraping tower door, cleaning tower steps for varnishing"
		3 "varnished tower stairs"
	July	2 "cleaning brass in...tower"
	Aug	7 "cleaning in tower"
		14 "general cleaning in...tower"
	Sept	4 "washing lantern in tower, also service room"
1916	April	29 "general cleaning in tower"
	May	1 "cleaned the clockwork in the tower"
		20 "painted colum [sic] in tower"
		27 "cleaning plate glass in lantern"
		29 "polishing lense"
	June	1 "painting black outside of lantern"
		3 "painting white in lantern"
		5 "painting pedestal and floor in lantern"
		6 "varnishing in tower"
		7 "varnishing stairs in tower"
		10 "cleaned plate glass in lantern, also cleaned brass in tower"
	July	10 "overhauling clock in tower"
		14 cleaned glass in tower
		28 cleaned tower brass and glass
	Sept.	18 cleaned brass in tower
1917	May	6 "Got the light all ready...have started the light going tonight"
		28 cleaned brass and glass
	Sept	11 "scraping paint from floor in lantern"
1919	July	5 "put new cable in tower"
1923	June	22 "1st asst. cleaned lens & brass in tower after the rain"
1925	June	13 "scrubbed rugs in tower"
	July	8 buy 150 gal. kerosene oil in Bayfield
	Aug	11 "covered wainscoting of lantern room with canvas for purpose of stopping leak"

		20	"painted 2nd coat on canvas outside the tower lantern room"
		25	"making door for tower lantern"
		29	"put on new wire cable on clock weight, tower"
	Sept	12	"Fitted and hung new door in lantern room"
		14	"Put canvas on lantern door"
1926	June	16	"polished the lens and cleaned running gear and clock work"
	Aug	10	"polished bright work, swept and dusted tower, showed visitors in tower & fog signal"
		17	"cleaned canvas rugs"
		22	"shortened up wire cable which operates clock in lantern room"
	Sept	6	"cleaned rugs in tower"
	Nov	13	"covered all steel brightwork of lens with vaseline"
1927	July	20	"painted 25 kerosene oil cans"
		22	"emptied 2 barrels kerosene oil into cans"
	Oct	29	"cleaned lamp burners in tower"
1928	May	22	"polished brass in service room"
	Aug	10	"washed...glass cleaning towels"
		16	"polished the lens brass and ventilators"
	Sept	3	"soldered hand lantern and handle of dust pan"
	Nov 29-30		made boxes to ship pedestal and clockwork for repairs
1929	May	25	"replaced hood in dome of tower"
	June	12	"painted tower"
		15	"oiled woodwork in tower"
		24	"put stair treads on tower"
		29	"scrubbed canvas for tower floor"
1930	Sept	25	"cleaned and greased steel surfaces on pedestal and clock work"
1931	June	13	"scrubbed carpets"
		20	"washed out rags"
		26	"washed lens, cleaned the deck, put carpet down"
	Sept	19	"Installed new Aladdin lamps in tower. There is a marked improvement in the light over the old type Hains lamps, increase in candle power about 300 percent. A much whiter light and more of it."
	Oct	21	"Work in tower & greased same for fall, removed charriot wheels, cleaned & oiled them"
1932	June	1	"scrubbed carpets for winch room & tower"
		7	"painted...floor in lens room"
		9	"varnished floor in lens room"
		13	made new screen for tower door
	July	20	"washed lamps in tower, charred wicks & refilled lamps"
		23	"having considerable trouble with Aladdin lamps in tower"
		30	"put new screens over ventilators in tower"
	Aug	16	installed ventilators from Sand Island light
	Sept	14	"built new shelves in supply room"

1932	front of book	Raspberry Island			
		Flash	3		sec[onds]
		Equlips [eclipse]	13	1/3	"
		Fixed white	30	1/3	
		Equlips	<u>13</u>	<u>1/3</u>	
			60		
1933	July	18	"base of tower varnished, rearranged shelf for watch book"		
	Oct	26	"soldering zink plates in tower, trying to make smooth job"		
	Nov	3	"painted white in tower"		
1934	May	10	painted inside of tower white		
1938	July	7	"put on new clock cord 70 [ft.]"		

APPENDIX I

“Brasswork, or The Lighthouse Keeper’s Lament”

Lightkeepers in the U.S. Lighthouse Service often spoke of the trouble they had keeping the brasswork polished at their stations. In response to their cries of frustration, Fred Morong, who was known by the keepers as their “Unofficial Poet Laureate,” wrote this poem to describe their plight.

O what is the bane of a light keeper’s life
That causes him worry, struggle and strife,
That makes him use cuss words, and beat at his wife?
It’s Brasswork.

What makes him look ghastly, consumptive and thin,
What robs him of health of vigor and vim,
And causes despair and drives him to sin?
It’s Brasswork.

The devil himself could never invent,
A material causing more world-wide lament,
And in Uncle Sam’s service about ninety per cent,
Is Brasswork.

The lamp in the tower, reflector and shade,
The tools and accessories pass in parade.
As a matter of fact the whole outfit is made
Of Brasswork.

The oil containers I polish until
My poor back is broken, aching; and still
Each gallon and quart, each pint and each gill
Is Brasswork.

I lay down to slumber all weary and sore,
I walk in my sleep, I awake with a snore,
And I’m shining the knob on my bedchamber door.
That’s Brasswork.

From pillar to post, rags and polish I tote.
I’m never without them, for you will please note
That even the buttons I wear on my coat
Are Brasswork.

The machinery, clockwork, and fog signal bell
The coal hods, the dustpans, the pump in the well;
Now I’ll leave it to you mates, if this isn’t—well,
Brasswork.

I dig, scrub and polish, and work with a might,
And just when I get it all shining and bright,
In comes the fog like a thief in the night:
Good-by Brasswork.

I start the next day and noontime draws near,
A boatload of summer visitors appear,
For no other purpose, than to smooch and besmear
My Brasswork.

So it goes all the Summer, and along in the Fall,
Comes the district machinist to overhaul
And rub dirty and greasy paws over all
My Brasswork.

And again in the Spring, if perchance it may be,
An efficiency star is awarded to me
I open the package and what do I see?
More Brasswork.

Oh, why should the spirit of mortal be proud,
In the short span of life that he is allowed
If all the lining in every dark cloud
Is Brasswork?

And when I have polished until I am cold
And I'm taken aloft to the Heavenly fold
Will my harp and my crown be made of pure gold?
No, Brasswork.

APPENDIX J

Extracts from the Raspberry Island station journal and other notes relating to installation and maintenance of the fog signal building and equipment, 1903-1952.

Original installation

Building erected June-July 1903

Original estimate included \$2400 for “boilers and machinery” and \$75 for “boiler covering”

Contract awarded to low bidder, Optenberg and Sonneman, Sheboygan, WI, around May 19, 1902, called for “furnishing and delivering the boilers and machinery required for the establishment of a steam fog signal” at Raspberry Island. The two boilers were to be 57" in diameter, 78" long. Contract price was \$2807.

Illinois Steel Co., Chicago, provided marine steel:

2 sheets	212" long	73" wide	3/8" thick	Shell
2 sheets	99"	62 1/2"	1/4"	Drum shell

[Shell presumably was for boilers; drum shell, for steam drums, above boilers, attached to whistle pipes.]

2 boilers, 2 engines, piping etc. were accepted and payment in full was authorized on March 5, 1903, in spite of 100 day delay. The equipment was delivered to Raspberry Island in June and installed in August 1903.

Maintenance—Boilers (1904-32), from station journals:

filled boiler No. 1, got up steam, blew out “valve connecting forward steam pipe with steam chest, steam burned keeper’s hand; repaired in 1 1/2 hrs. (5/17/04)

painted No. 1 boiler (5/24/04)

blackened boilers and connecting pipes, cleaned brass on boiler No. 2 (5/1/06)

cleaned furnaces and ash pits (12/1/11; 5/4/12)

painted piping, boiler fronts, and smoke stacks (5/11/12)

fired No. 1 boiler, tried out engine siphoning water, blew out flue, keeper went to Long Island for flue plugs (4/22-23/15)

painting the jackets in signal (5/20/15)

put two new flues on No. 1 boiler (8/6/15)

testing and grinding safety valves on both boilers (8/11/15)

painting boilers and pipes (8/14/15)

cleaning floor and jackets (8/27/15)

washed boiler jackets (5/16/16)

put in new soft plug in crown of No. 2 boiler (10/7/16)

painting boiler covers and boilers (6/9/17)

painting pipes and boiler covers (5/25/23)

putting concrete bed under no. 1 boiler (7/25/24)

painting boilers and pipes (6/7/26)

repaired soot apron for fog signal (7/2/26)

“repaired bed under boiler, the ash pit” (7/29/27)

“put new gasket in union 3/4 in. steam line #2 boiler” (8/14/27)

“blowed off no. 1 boiler, removed hand hold plates and cleaned inside” (12/2/27)

“blowed off #2 boiler and washed it through the hand holes” (12/5/27)

removed ashes from ash pits (7/9/28)

“9 grate bars, 5 ft. long, Fog Signal furnace on hand. 112 boiler flues—tubes” (7/20/78)

oiled surplus boiler tubes to prevent rusting (11/23/28)

finished painting boilers with red lead (9/26/29)

“made new canvas apron for cleaning tubes in boiler” (9/19/30)

Maintenance—Steam Engines (1904-32)

painted No. 2 engine (9/14/03)

painted globe valves and trimming on engine (9/22/03)

painted engine, cleaned brass and iron on engine (5/24-26/04)

put new foundation under No. 2 engine (9/17/06)

painted engine beds (5/14/12)

changing exhaust pipe, No. 2 engine (5/17/15)

painted engines (5/24/15)

fixing drain pipe from water column on No. 1 boiler (5/25/15)

made canvas cover for engine (10/15/25)

polishing steel on No. 1 engine (5/15/16)

received new lubricator for no. 1 engine (9/25/16)

painting engine bases (6/23-26/26)

fixed canvas cover for engine (7/2/26)

Maintenance—Water tank (1904-32)

pumped water tank in fog signal with hand pump (6/13/10)

water tank giving way from wall about 2 inches (4/26/24)

siphoned water, filled no. 2 boiler, supply tank and cistern (4/18/25)

fitted new pieces 1 1/4" and 1" in water and steam lines to siphon system because of steel plate in wall where they came through (11/7/25)

photograph (fig. 6) shows boxed water line from cistern under south window of fog signal

Maintenance—air diaphone equipment (1932-39)

scraped and red leaded air tank for new signal (6/30/32)

scraping paint off new tanks, getting them ready to red lead (7/21/32)

red leaded tanks (8/8-9/32)

red leaded fuel tank (8/9 and 15/32)

red leaded pump in boat house, ready to enamel (8/16/32)

assembled new engine and got compressor engine ready to work on (8/25/32)

worked on small air compressor and duplex pump, scraping and painting (8/30/32)

painted heads and fly wheels on engines and pump (9/7/32)

run compressor, pumping water for dwelling to pump from signal & installed it on dock to pump water for quarters (4/29/33)

installing new starting compressor (5/2-4/33)

painting Diaphone (5/23/33)

Diaphone airline parted (6/21/33)

painted air compressors, pump, large engine (6/22/33)

painting "lead color...tank" (6/6/35)

repaired flat belt for Curtis compressor (9/24/37)

painting black trim on engines (5/15/39)

Maintenance—structural (1903-39)

painted window shutters (9/24/03)

fixing a door on east side of signal house (11/13/03)

painted bulkhead in signal house (6/2/04)

painted red part of walls in signal (5/30/11)

painted the red walls in fog signal house (6/3/12)

scrubbing red paint off wall inside signal (9/21/14)

painting walls in signal (9/22/14)

painting trim on fog signal (5/12/15)

painting walls in signal (5/17/15)

painting fog signal roof red (5/5-6/16)

painting ceiling (5/12/16)

washed walls (5/16/16)

painting shutters (6/19/19)

painting shutters (6/1/22)

put new plank on roof for whistles (8/12/24)

removed 3/4 of floor, laid new 4" sewer crock, and new concrete floor (10/31-11/6/25)

put steel plates on outside of south wall to straighten wall (11/25)

dressing and painting 2 planks for fog signal (6/12/26)

painting wood in signal (5/23/33)

building screen doors for fog signal (7/11/33)

hanging " " (8/22/33)

scrubbing in fog signal, painting doors and window frames white (6/15-18/34)

painting signal walls and ceiling cream (5/30-31/35)

painting walls and tank lead color (6/5-6/35)

finished railing around Diaphone platform (10/6/37)

finished cream in signal (5/12/38)

finished gray in signal (5/18/38)

Furnishings and fixtures (1903-39)

made closet for paint buckets (9/14/03)

put in heating stove to keep water from freezing (11/7/03)

painted spar buoy and ladders in signal (5/10/06)

making and painting new cover for signal cistern (9/24 and 10/2/15)

making new ladder for signal roof (11/24/15)

replaced cupboard, tools, and equipment after laying new floor (11/12-13/25)

painting tool cupboards (6/7/26)

polished lamps (9/12/27)

painted signal chairs and stepladder (6/8/29)

made new steps for ladder in signal (9/10/30)

painted chairs and ladder (7/9/31)

painted locker in signal (5/5/33)

built gasket locker, put all gaskets in locker (5/6-8/33)

hung up tools (5/8-9/33)

building locker for fittings in signal (6/16/33)

refinishing top of work bench for signal (6/20/33)

built rack for oil barrels in signal (7/27/33)

built rack for ladder jacks (8/2/33)

hung Aladdin lamp in signal (10/7/33)

put tools in place after painting (6/7/35)

Fixtures in place, 1989

Tie rods and exterior steel plates (1925)

Diaphone platform and dormer (1932)

Steel stairway to Diaphone platform (1932)

Battery bank and shelving (1941)

Kohler engine (1944)

Laganke Electric Co. control panel, ca. 1941-44

Ceiling light fixtures, electric, ca. 1941

APPENDIX K

“Care of Lights and their Appurtenances” and “The Steam Whistle. —Instruction for the management of engines and boilers,” from U.S. Light-House Establishment, *Instructions to Light-Keepers... 1902*, pp. 20-22, 38-43, plates 27 and 27a.

Care of Lights and Their Appurtenances.

- Punctuality demanded.** 123. Lights must be lighted punctually at sunset, and must be kept burning at full intensity until sunrise.
124. All preparations must be made early, that there may be no delay in lighting.
- Morning duties.** 125. When the light is extinguished in the morning the keeper must hang the lantern curtains and immediately begin to put the apparatus in order for relighting. While doing this the linen aprons provided for the keeper's use must be worn, that the lens may not suffer from contact with the wearing apparel. The illuminating apparatus must be carefully covered before the cleaning is begun.
- Cleaning lens.** 126. The lens and the glass of the lantern must be cleaned daily and always be kept in the best possible condition. Before beginning to clean the lens it must be brushed with the feather brush to remove all dust. It must then be wiped with a soft linen cloth, and finally polished with buff-skin. If there is oil or grease on any part it must be taken off with a linen cloth, moistened with spirits of wine, and then polished with a buff-skin. *Under no circumstances must a skin which has been wet or damp be used, as this will scratch the lens.*
- To prevent frosting of the plate-glass of lanterns.** 127. To prevent the frosting of the plate glass of lanterns, put a small quantity of glycerin on a linen cloth and rub it over the inner surface of the glass. One application when the lamp is lighted and another at midnight will generally be found sufficient to keep the glass clear during the night.
- Care of reflector.** 128. To clean reflectors, first dust them and then rub with a buff-skin, lightly dusted with rouge powder, kept in a small double bag of muslin; then rub lightly with another skin, and finally with a third, which should be passed over the reflector in a light, quick manner with a circular motion. Leakage of gas from the pipe of the stove used in the watch room should be carefully guarded against, as this gas will badly tarnish a reflector. Silver-plated reflectors are much more easily injured than glass, and require great care.
- Care of chimneys.** 129. To clean the chimneys they must, if soiled by smoke or oil, be rubbed with a rag or a small piece of soft wood dipped in oil, then wiped off and cleaned with whiting. If this does not remove discolorations they should be rubbed with a wet cloth and a little soda or common salt; but they must be washed in warm water afterwards, as any adhering salt will cause breakage.
- Material for cleaning and polishing.** 130. Keepers are forbidden to use any other materials for cleaning or polishing purposes than those supplied by the Light-House Establishment.

Dust to be avoided.	131. Keepers are forbidden to clean the floors of the lanterns or the stairs and floors of towers with any material by which dust may be produced. All materials used must be damp, and be carefully removed before they are dry. All sweeping must be done with care, and chiefly with hand brushes.
Place for utensils.	132. Utensils of all kinds must be kept in their proper places. While the light is burning, everything which does not belong in the lantern must be removed from it.
Clockwork.	133. The revolving clockwork must be kept carefully from dust; it must be oiled with clock oil whenever necessary, care being taken to remove any old and gummy oil before new oil is applied. All parts made of iron or steel must be rubbed with a cloth greased with tallow. The use of salted grease is forbidden. The foot of the fly shaft must be examined occasionally to see that it is not cutting or wearing.
Chariot.	134. The chariot or carriage upon which the lens revolves must be carefully wiped and the rollers kept properly oiled. If it is necessary to take off the rollers and clean them, this must be done with great care. The rollers must be removed one by one, and put back without changing the number of washers previously in use, as the carriage will turn irregularly if all the rollers are not exactly the same distance from the center. When there is any serious trouble with any part of the revolving clockwork or machinery the inspector and engineer must be at once informed, and a machinist will be sent to remedy the difficulty.
Weight.	135. When not in use, the weight must always be kept upon its rest, that the strain on the cord may be relieved.
To replace broken panes.	136. Keepers must replace the broken glass of the lantern as quickly as possible. They must learn how to use the cutting diamond, so as to be able to cut the glass when necessary. When glass is cut, its edges should be ground level and smooth by rubbing it upon a cast-iron plate covered with sharp wet sand. In placing the glass, about one-twelfth of an inch play should be left all around between it and the iron frame. If it touches the iron, great risk of its being broken by the oscillation of the lantern in high winds will be incurred. Thin cleats of lead or soft wood must be used to rest the glass upon when in place. In joining two pieces of glass which rest one upon the other, the upper edge of the lower piece should be covered with putty about two-tenths of an inch in thickness; on this two small strips of lead should be placed, upon which the upper plate should rest; the weight will press out any excess of putty, which excess should immediately be taken off with the glazing knife. The putty on the outside of the frame should be laid evenly and flush with the face of the sash. In replacing the outside slats of the sash, a small quantity of putty should be put over the head of each screw after it has been screwed home, as this will serve to keep the screw in place.

The Steam Whistle.—Instruction for the Management of Engines and Boilers

- Firing up.** 248. Should the steam boiler have a heater attached to it for keeping the water in it warm preparatory to raising steam, fire should be made under it as soon as there is any indication of a necessity for using the fog signal, which fire must be continued, with the draft so regulated as to raise the temperature of the water in the boiler from 190 to 210 F. as speedily as possible. The water being at this temperature, fire should be cautiously made in the furnace as soon as it is seen that the fog signal will be required, and when there is sufficient steam for operating the fog signal effectively and continuously, according to its distinguishing character, it should be put in motion. The time, state of the weather, etc., should be duly noted.
- Preparatory precautions.** 249. Whenever the fire is allowed to go out, or is drawn from the boiler, the furnace and ash pit should be thoroughly cleaned, kindling wood placed in the furnace, and everything made ready for lighting when it shall be again needed. In starting the "getting up steam" in the boiler, the fire should be controlled to burn moderately, and the safety valve kept open until the steam escapes freely, when the valve may be closed and the fire permitted to burn to full activity.
- Precautions during cold weather.** 250. In cold weather, with indications of fog or snow, the water in the boiler should be kept at 190 to 210 F. by the heater; but great care must be taken in firing not to force the heater so much as to run the risk of so rapidly evaporating the water as to burn it.
- Connecting pipes to be examined.** 251. After the heater is in full action, there will be nothing to fear in "forcing" the heater, if the connecting pipes are of proper size and clear. These pipes should be occasionally examined to see that they are unobstructed.
- Obstructions.** 252. If in any case the attendant finds the temperature increasing in the heater, so that steam is making, and there is no increase of temperature of the water in the boiler, there will be reason to apprehend that there is some obstruction in the circulation between the heater and the boiler, and the fire should be hauled or allowed to die out in the heater, the fire having at the same time been started in the boiler. As soon as the use of the boiler ceases for the occasion, an examination should be made, to ascertain, if any, and what, obstruction there was to the circulation. When heaters are not provided, the above results may be obtained by banking the fires in the fog-signal boiler.
- Oiling.** 253. While the keeper is getting up steam, he must be careful to oil all the working parts of the machinery, and by close inspection see that all the oil holes are clear, and that they take oil freely. As often as once a month (as there may be opportunity) the several wearing parts must be taken apart and carefully cleaned and oiled.
- Quantity of water.** 254. At all times, while the engine is in operation, see that there is, as near as may be, in boilers of the locomotive type, two cocks of water, and in upright boilers one and a half cocks. The aim should be never to have less than two cocks of water in the former or one in the latter.

- Foaming.** 255. Should the water in the boiler foam, prime, and rise at any time while the signal is in operation or while raising steam, shut off for a few moments for the foaming to subside, then ascertain the quantity of water left in the boiler, when open again and increase the quantity of feed water to supply deficiency. If the boiler shows a disposition to foam or prime, the valves should not be opened suddenly but gradually, or if necessary to open suddenly for short blasts, it should be closed quickly before the foam can rise to obstruct the flow of steam. (In the whistle machines the opening of the whistle valve is always sudden, and can not be closed except suddenly, and after the full duration of the blast, without changing the characteristics of the signal.)
- Feeding foam-ing boilers.** 256. Boilers that foam must be pumped up or fed with great care, yet observing the safer course of pumping enough, and never allowing the water to get out of sight. If it should occur that, from any cause, the water should fall below the gauge cocks and glass, do not haul fires, and do not put on the feed, or change any valve, nor open the safety valve, but charge the furnace full of the finest coal at hand, so as to completely deaden the fire, leave the fire door open and close the damper partially. Keep everything in this condition till the boiler cools off, occasionally sprinkling water on the fire, if necessary, to keep it deadened. After the boiler has cooled down, refill the water to the proper height, examine to ascertain if the pump is out of order, or from what cause the water has fallen too low in the boiler, clear out the furnace, recharge with kindling, and prepare everything for again lighting fires.
- Gauge cocks.** 257. The gauge cocks must be kept in good order at all times, and while the machine is in operation, or steam raising for work, they must be frequently tried. They must be kept open, and answer properly whenever tried. The glass gauge must not be wholly depended upon.
- Glass gauge.** 258. The glass gauge must be frequently "blown out," to see that all the passages and valves are clear.
- Safety valve.** 259. The safety valve must be kept in good working order at all times, and be frequently examined while the machine is in operation. The safety valve must be taken apart once a month, to see that it is in good order and clean, and that it works freely.
- Pumping.** 260. Regular and continuous pumping is essential to the economical consumption of fuel, which can be easily done by giving a little attention, and by partially closing the cock in the pipe which supplies the pump, but no pipe between the pump and the boiler should be closed at all. A few trials will enable the keeper to determine the proper point at which the supply cock should be closed, which point, when satisfactorily ascertained, must be marked, to serve as a guide afterwards. The keeper must not rely upon the fact that the valve is open which supplies the water to the pump, but must frequently examine the glass gauge and try the gauge cocks, as, although the supply valve to the pump is open, the pump may cease working, and the fact not be discovered till the water is too low in the boiler.
- Regulation of draft.** 261. The furnace door should be kept closed as much as possible governing the fire mainly by the damper in the chimney. While firing, and during work, keep the ash-pit door open, but close it when work ceases.
262. The furnace doors of tubular boilers must not be opened wide for "cooling down." The sudden admission of cold air will contract the tubes too suddenly and fracture them, causing leaks; but they may be partially opened to aid in cooling down the boiler.

Daily attention to ash pit, boiler, and flues.

263. The space below the grate bars in the ash pit must be kept free from ashes and cinders, should they be allowed to come in contact with the grate bars they would soon melt. When the engine is at work the ash pit must be cleaned out at least as often as once a day. The boiler and flues should be brushed clean daily, if possible, and although no positive rule can be laid down for periodical cleaning, it must not be forgotten that they are never to be foul. After thirty or thirty-six hours' firing (and oftener if the draft is found to be sluggish), the necessity for brushing out the flues, to remove ashes and soot, will be apparent. When the engine is stopped clean the boiler and flues and put everything in order at once for starting the signal again.

Difference between pressure gauge and safety valve.

264. In case there should be at any time a difference in the indications of the steam-pressure gauge and the safety valve lose no time in ascertaining the cause and apply the proper remedy to the defective instrument at once.

Quality of water.

265. As the water used in the boilers may be of a different quality at different stations, special attention should be given to it. When the water used holds salts in solutions, or mud, or sediment in suspension, more frequent blowing off will be necessary than if the water is pure and entirely free from those impurities. Care and good judgment are required in the management of boilers under these circumstances; but, above all, it is necessary to be very careful to prevent the deposit of mud, lime, salt, or other solid matter in the bottom of the boiler, inasmuch as such deposits endanger both life and property. Deposits of mud will be readily seen by its accumulation about the gauge cocks and by the "spatter" from the cocks being foul.

Water blow.

266. The "water blow" should be opened once in twelve hours, if but for a moment, simply to start the sediment, and longer if the water "blows foul," taking care, however, to shut the valve or cock before the water is too low in the boiler. Do not leave the blow cock for an instant, while open, but be sure to shut before leaving it.

Sea water.

267. In case sea water is necessarily used continuously, frequent but light blowing off should be resorted to, in preference to occasional exhaustive blowing off, as the latter course necessarily prevents uniformity of work by the engine.

If sea water is used, blow off for a short time, every two hours, and as often as the boiler is cooled down and opportunity offers. Open the boiler and examine the tubes to see if there has been any scale or deposit made upon them; if so, the amount of water blown off has not been sufficient and must be increased.

Fresh water.

268. When fresh-water tanks are furnished, from which the boiler can be refilled without the use of a pump, the boiler should be blown out at the end of any protracted fog, but care should be taken to fill the tank before the blowing out.

Pressure of steam.

269. Instructions as to the pressure of steam to be used will be given by the district officer.

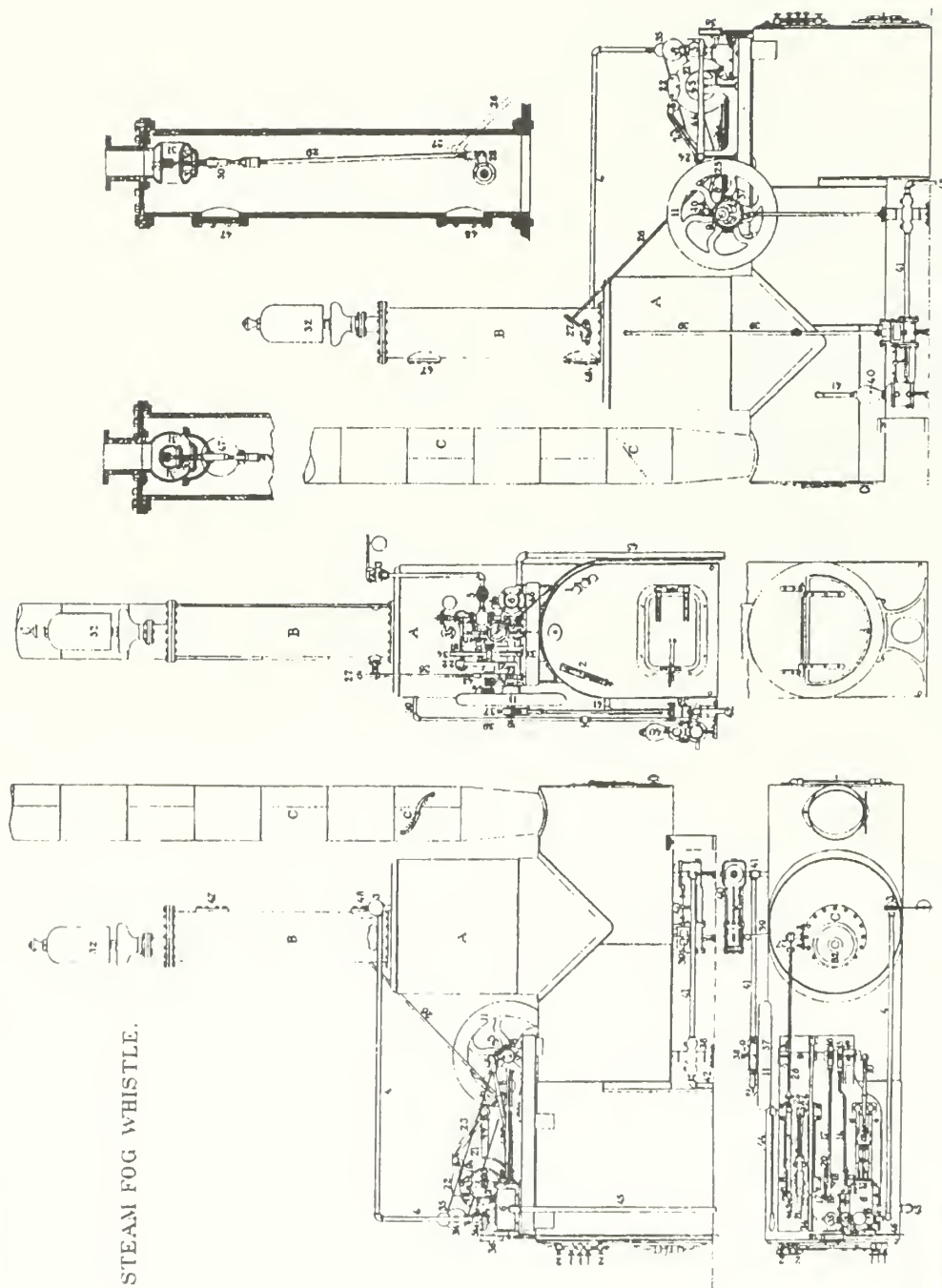
Freezing.

270. Great care must be exercised to avoid the effect of freezing weather. Fire must be constantly kept in the heater; all the pump "pet cocks" must be kept open. If the weather is very severe it will be well to keep low steam (say 5 to 10 pounds) on the main boiler, keeping the temperature in the engine house, if possible, sufficiently high that a thermometer at the floor will not fall to the freezing point.

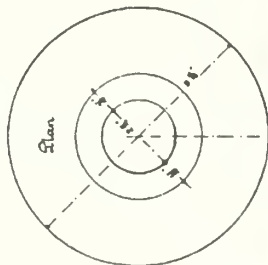
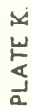
Winter precautions.	271. When the apparatus is to be laid up for the winter, be sure that the water is all out of the pipes; leave all cocks open; take off the pump doors and the check-valve cap; empty the tank.
Use of anthracite.	272. In firing with anthracite coal, the bed of fuel should be as thin as can be carried, so that there are no holes for cold air to pass through the fuel; as a rule, the smaller the coal the thinner the fire. With bituminous coal the fire must be thicker, to avoid air holes through it; also if the bituminous coal is "binding" coal, that is, runs or binds together, it must be occasionally broken or lightened up, with the "slice bar," to keep the fire open. A well-constructed steam boiler is fitted to do its work best when consuming a certain fixed quantity of fuel (coal or wood). Above or below this point there must be more or less waste, and there is as much above it as below it.
Hauling fires.	273. Haul all fire always before blowing down, and be careful to see that no fire is left under the boiler when blowing down is commenced. Keep the furnace and ash-pit doors closed to prevent too sudden cooling of the boiler and the consequent fracture by too sudden contraction of the tubes.
Starting engine.	274. See that the cylinder waste cock is open, and all the water in the cylinder from condensed steam is removed before starting the engine. As soon as the engine becomes warm, attend to the pump and see that it works well, to prevent any detention on account of a want of a proper quantity of feed water.
Stopping engine.	275. When there is no longer necessity for working the engine, open the drip cock of the steam cylinder (and in cold weather open also the cocks in the pipes) to allow all the water to run out of them to prevent damage by freezing.
Description of plates.	276. The following-named parts of the steam fog whistle are shown in Plates 27 and 27a [not illustrated]: <ul style="list-style-type: none"> A. Steam drum. B. Stand pipe. C. Chimney. C'. Damper 1. Gauge cocks. 2. Water gauge. 3. Safety valve. 4. Steam pipe for engine. 5. Throttle valve for engine. 6. Steam cylinder. 7. Piston rod. 8. Connecting rod. 9. Fly-wheel shaft. 10. Crank. 11. Fly wheel. 12. Cam-wheel shaft. 13. Slide-valve rod. 14. Slide-valve connecting rod. 15. Slide-valve eccentric. 16. Vibrating eccentric. 17. Vibrating connecting rod. 18. Vibrating ratchet arm. 19. Ratchet. 20. Ratchet wheel. 21. Cam wheel. 22. Cam. 23. Cam-wheel arm.

24. Cam-wheel arm shaft.
25. Whistle-valve lever, exterior.
26. Whistle-connecting rod, exterior.
27. Whistle-valve lever, exterior.
28. Whistle-valve lever, interior.
29. Whistle connecting rod, interior.
30. Whistle valve.
31. Valve seat and steam outlet.
32. Steam whistle (Plate 27).
33. Governor pulley on fly-wheel shaft.
34. Governor pulley on pulley shaft.
35. Governor.
36. Pressure gauge.
37. Pump eccentric.
38. Pump.
39. Steam pipe for auxiliary pump.
40. Auxiliary pump.
41. Feed pipe.
42. Suction pipe.
43. Friction wheel.
44. Hand lever.
45. Exhaust pipe.
46. Drip pipe.
47. Hand-hole.
48. Hand hole.

STEAM FOG WHISTLE.



Note N to be allowed according to time wanted



NUT L



Office of U. S. Light House Engineer.
Sailing District
Tombstone, Ariz. Aug 19th 1900
J. B. at Engrs.
Lieut Col of Engineers, U. S. A.
Engineer 3rd L. H. District

APPENDIX L

Drawings (3 sheets) for "Steam Fog Signals for 9th and 11th L.H. Districts," prepared in the Office of the Engineer, Detroit, Michigan, January 28, 1896; with "Specifications for Boilers (in duplicate) and Attachments (without Engines) for St. Martin Island Light Station, Michigan"; and drawing of "Briehen for Fog Signal Boilers," Office of Light House Engineer, 9th District, Milwaukee, July 5, 1899. All filed with Optenberg & Sonneman's contract for the St. Martin's Island boilers, awarded April 7, 1903 (File 2759, Light House Board Contracts, RG 26, National Archives, Washington, D.C.)

PLATE 1

CONSTRUCTION

W. B. Smith

1893

Dimensions in feet and inches

Scale 1" = 1'-0"

1/2" = 1'-0"

1/4" = 1'-0"

1/8" = 1'-0"

1/16" = 1'-0"

1/32" = 1'-0"

1/64" = 1'-0"

1/128" = 1'-0"

1/256" = 1'-0"

1/512" = 1'-0"

1/1024" = 1'-0"

1/2048" = 1'-0"

1/4096" = 1'-0"

1/8192" = 1'-0"

1/16384" = 1'-0"

1/32768" = 1'-0"

1/65536" = 1'-0"

1/131072" = 1'-0"

1/262144" = 1'-0"

1/524288" = 1'-0"

1/1048576" = 1'-0"

1/2097152" = 1'-0"

1/4194304" = 1'-0"

1/8388608" = 1'-0"

1/16777216" = 1'-0"

1/33554432" = 1'-0"

1/67108864" = 1'-0"

1/134217728" = 1'-0"

1/268435456" = 1'-0"

1/536870912" = 1'-0"

1/1073741824" = 1'-0"

1/2147483648" = 1'-0"

1/4294967296" = 1'-0"

1/8589934592" = 1'-0"

1/17179869184" = 1'-0"

1/34359738368" = 1'-0"

1/68719476736" = 1'-0"

1/137438953472" = 1'-0"

1/274877906944" = 1'-0"

1/549755813888" = 1'-0"

1/1099511627776" = 1'-0"

1/2199023255552" = 1'-0"

1/4398046511104" = 1'-0"

1/8796093022208" = 1'-0"

1/17592186044416" = 1'-0"

1/35184372088832" = 1'-0"

1/70368744177664" = 1'-0"

1/140737488355328" = 1'-0"

1/281474976710656" = 1'-0"

1/562949953421312" = 1'-0"

1/1125899906842624" = 1'-0"

1/2251799813685248" = 1'-0"

1/4503599627370496" = 1'-0"

1/9007199254740992" = 1'-0"

1/18014398509481984" = 1'-0"

1/36028797018963968" = 1'-0"

1/72057594037927936" = 1'-0"

1/144115188075855872" = 1'-0"

1/288230376151711744" = 1'-0"

1/576460752303423488" = 1'-0"

1/1152921504606846976" = 1'-0"

1/2305843009213693952" = 1'-0"

1/4611686018427387904" = 1'-0"

1/9223372036854775808" = 1'-0"

1/18446744073709551616" = 1'-0"

1/36893488147419103232" = 1'-0"

1/73786976294838206464" = 1'-0"

1/147573952589676412928" = 1'-0"

1/295147905179352825856" = 1'-0"

1/590295810358705651712" = 1'-0"

1/1180591620717411303424" = 1'-0"

1/2361183241434822606848" = 1'-0"

1/4722366482869645213696" = 1'-0"

1/9444732965739290427392" = 1'-0"

1/18889465931478580854784" = 1'-0"

1/37778931862957161709568" = 1'-0"

1/75557863725914323419136" = 1'-0"

1/151115727451828646838272" = 1'-0"

1/302231454903657293676544" = 1'-0"

1/604462909807314587353088" = 1'-0"

1/1208925819614629174706176" = 1'-0"

1/2417851639229258349412352" = 1'-0"

1/4835703278458516698824704" = 1'-0"

1/9671406556917033397649408" = 1'-0"

1/19342813113834066795298816" = 1'-0"

1/38685626227668133590597632" = 1'-0"

1/77371252455336267181195264" = 1'-0"

1/154742504910672534362390528" = 1'-0"

1/309485009821345068724781056" = 1'-0"

1/618970019642690137449562112" = 1'-0"

1/1237940039285380274899124224" = 1'-0"

1/2475880078570760549798248448" = 1'-0"

1/4951760157141521099596496896" = 1'-0"

1/9903520314283042199192993792" = 1'-0"

1/19807040628566084398385987584" = 1'-0"

1/39614081257132168796771975168" = 1'-0"

1/79228162514264337593543950336" = 1'-0"

1/158456325028528675187087900672" = 1'-0"

1/316912650057057350374175801344" = 1'-0"

1/633825300114114700748351602688" = 1'-0"

1/1267650600228229401496703205376" = 1'-0"

1/2535301200456458802993406410752" = 1'-0"

1/5070602400912917605986812821504" = 1'-0"

1/10141204801825835211973625643008" = 1'-0"

1/20282409603651670423947251286016" = 1'-0"

1/40564819207303340847894502572032" = 1'-0"

1/81129638414606681695789005144064" = 1'-0"

1/162259276829213363391578010288128" = 1'-0"

1/324518553658426726783156020576256" = 1'-0"

1/649037107316853453566312041152512" = 1'-0"

1/1298074214633706907132624082305024" = 1'-0"

1/2596148429267413814265248164610048" = 1'-0"

1/5192296858534827628530496329220096" = 1'-0"

1/10384593717069655257060992658440192" = 1'-0"

1/20769187434139310514121985316880384" = 1'-0"

1/41538374868278621028243970633760768" = 1'-0"

1/83076749736557242056487941267521536" = 1'-0"

1/166153499473114484112975882535043072" = 1'-0"

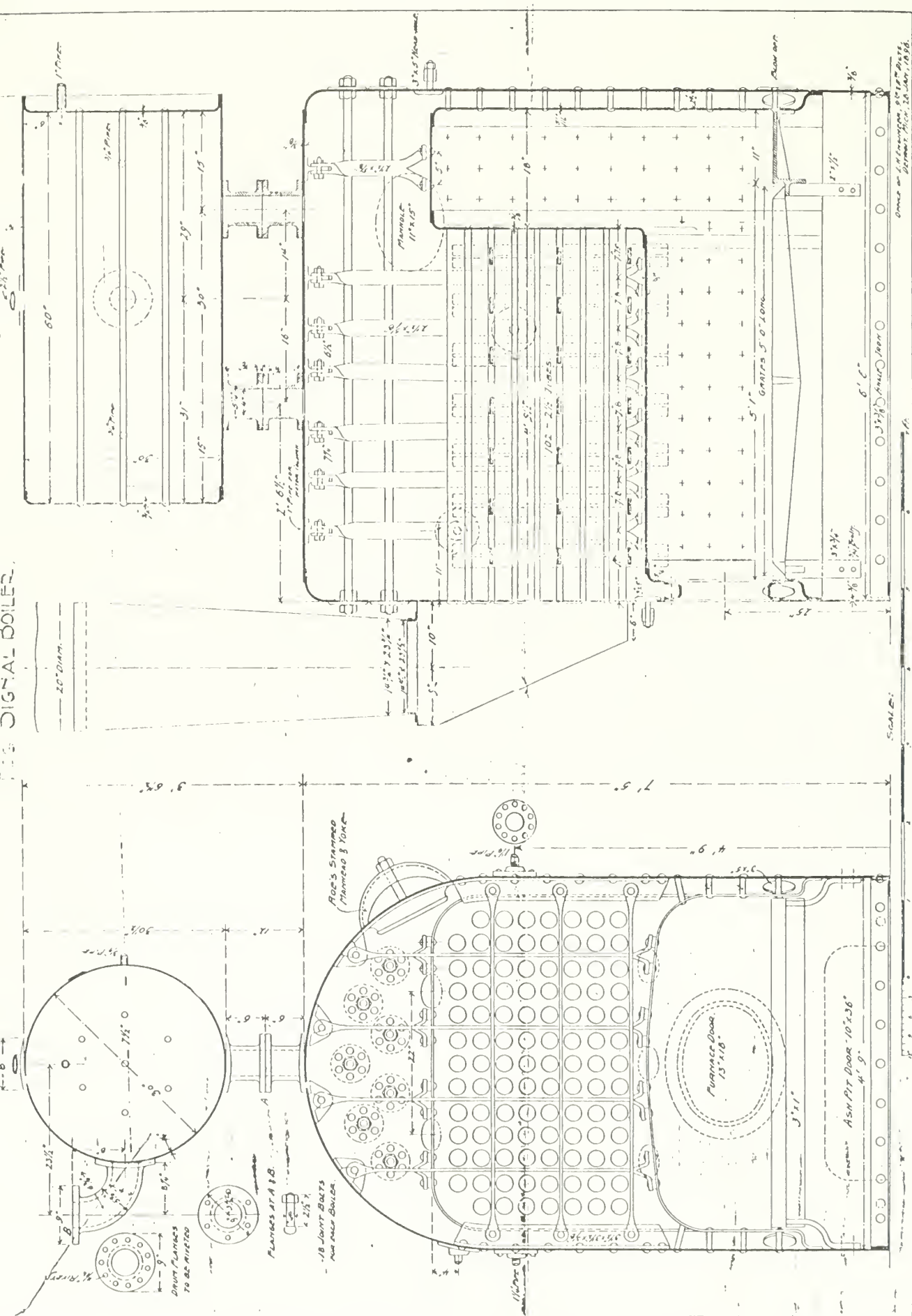
1/332306998946228968225951765070086144" = 1'-0"

1/664613997892457936451903530140172288" = 1'-0"

1/1329227995784915872903807060280344576" = 1'-0"

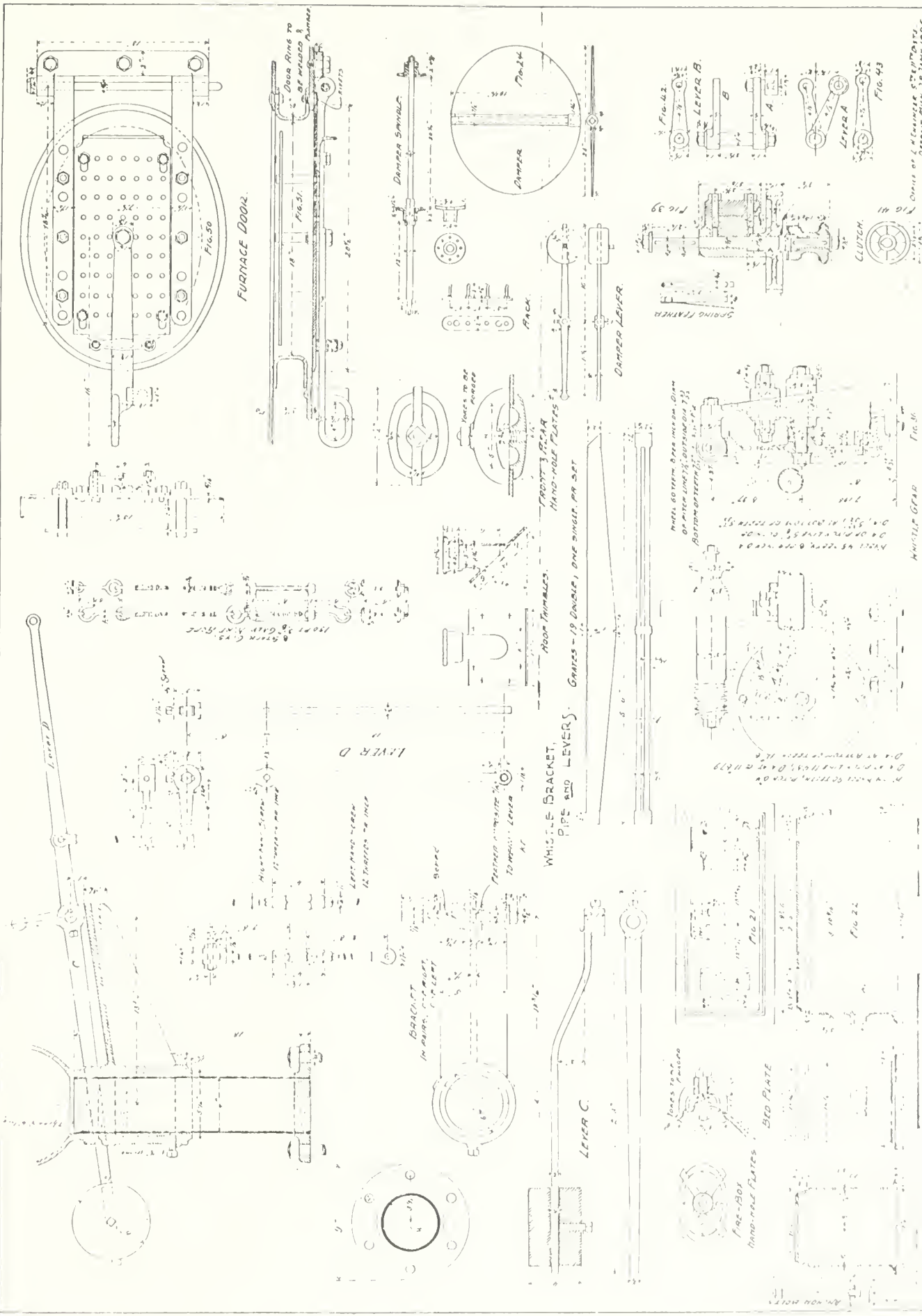
1/26584559915698317458076141205

•



STEAM TUG SIGNALS FOR 9TH AND 11TH L.H. DISTRICTS.

PLATE 4.



**SPECIFICATIONS
FOR BOILERS (IN DUPLICATE)
AND ATTACHMENTS (WITHOUT ENGINES)
FOR ST. MARTIN ISLAND LIGHT STATION, MICHIGAN.**

GENERAL DESCRIPTION

Fog-signal apparatus for a light station is usually constructed in sets of two, consisting of one right hand and one left hand boiler and engine, erected in the same house, in which case corresponding adjustments must be made in the several appliances.

In fitting the attachments, the boilers are to be so placed that the faces of the steam drum nozzles are on one level. When steam drums have been fitted and bolted to the boilers, the upper faces of elbows for the reception of whistle pipes must be level, so as to secure a vertical position to the latter. The boiler attachments are all to be put in place, and all necessary pipe connections are to be made in a neat and workmanlike manner.

BOILERS

The boiler, with details, shown on Plates 1, 2 and 4, to be of the open bottom, marine pattern, of dimensions figured on plans. Front, rear and outside sheets to be in one piece respectively, extended to form ash pit; the sheets of fire box and combustion chamber to be of the dimensions and arrangement shown on Plate 2.

A 3 x 3 x 3/8-inch steel angle is to be riveted to the lower edge extending around the interior, except under ash pit door, and forms a base for the boiler.

Tube sheets must be accurately bored for tubes, and the holes evenly spaced.

The boiler to contain 102 tubes 2 1/2 inches diameter by 4 feet 9 1/2 inches long.

The boiler to be provided with one Roe's stamped man-hole frame, plate and yoke of steel, and wrought iron bolt placed as shown on Plate 2. Hand holes to be provided as shown, the plates of cast iron, the yoke and bolts of wrought iron, as shown in detail. Blow-off cock to be placed at bottom of fire box, reinforced with an extra plate of steel 5/16 inch thick. Blow-off hole must be tapped square to back head.

Connections and flanges for steam drum, whistle, safety valve, feed water and combination gauge to be of cast steel or wrought iron and pipe threads

must be tapped square with sheets to give pipe a true horizontal or vertical position as the case may be, all as shown on drawing for right and left hand boiler. Furnace door and fittings to be constructed of wrought iron and door provided with perforated slide for ventilation. The ash pit door of wrought iron to be fitted with sector as indicated.

BOILER TUBES:

New lap welded tubes of standard gauge to be of the best quality of charcoal iron, Allison or Tyler manufacture, their annealed ends to be expanded and beaded over. Roller expander to be used.

STEAM DRUM:

Steam drum 30 inches diameter and five feet long to consist of two heads 5/16 inch thick, and one shell sheet 1/4" thick, the longitudinal seam of latter to be double riveted and the seam located as indicated, but for right and left hand plants. The back head to be reversed. Drum to be connected with boiler by cast steel nozzles riveted to boiler and drum. Faces of the connecting flanges to be true, each pair in accurate contact without being strained by joint bolts. A flange tapped for 2 1/2" pipe for attachment to safety valve, and an elbow through which steam will be conveyed to whistle valve,, are to be riveted to drum. Three steam pipe connections to be provided for signal apparatus, injector and pump, to be tapped for 3/4" wrought iron pipe, and one connection, for fire plug, to be tapped for one inch pipe.

BRITCHEN:

Britchen to be made of 1/8-inch sheet iron, provided with door for cleaning tubes, and with substantial lugs to secure same to studs screwed into boiler.

It is to be reinforced around the entire front inside with 1" x 1" x 3/16" angle, securely riveted.

GRATES:

The grates are to be single and double bars as shown, with level ends, placed on proper bearers, and to be at least one inch shorter than distance between dead plate and fire box end. Six extra grates are to be furnished with each boiler.

BOILER ATTACHMENTS

The following attachments are to be furnished for and fitted to each boiler:

1. One 2 1/2" lever safety valve, with composition valve seat and stem, provided with a weight sufficiently heavy to blow off steam at 100 lbs. of pressure, attached by a short nipple to the 2 1/2" flange of steam drum; 15 feet of 2 1/2" pipe, threaded one end including elbow and two nipples, and two small dock pulleys, with the necessary cord to conveniently lift safety valve by hand. The ends of levers to be drilled for the reception of cord with sharp corners of holes removed.
2. One 2" composition blow-off cock, with 20 ft. of 2" pipe, two 2" nipples, three 2" elbows, one 2" tee, and one 2" union.
3. One 1 1/4" composition check valve, and one 1 1/4" globe valve.
4. One steam gauge 5 1/2" in diam. with cock and siphon.
5. One combination gauge of pattern shown in drawing, Plate 1, fitted with three brass composition gauge cocks, provided with stuffing boxes and a glass water gauge, glass 12 1/2" long, the latter to be attached to the column at such height that the water will disappear from glass when water level in the boiler is 2" above the crown sheet. Pipe connections to be no less than 1" diam.
6. One hoe, one slice bar and one poker will be provided, as shown on drawings.

CAULKING

All seams to be neatly chipped and caulked, the joints between all cast flanges and shell to be caulked on the inside. Furrows caused by chipping or calking [sic], or defective rivet holes, will be sufficient cause for rejection of the work.

MATERIALS AND WORKMANSHIP

All materials to be used must be of the best quality of their respective kinds, and the workmanship must be first class in every respect.

All 1/4 and 5/16" sheets used in the construction must be of the best quality of fire box steel, and all other sheets must be of the best quality of flange

steel, having an ultimate tensile strength of not less than 55,000 and not more than 65,000 pounds per square inch of cross section, with an elongation of at least 25 per cent. in 8 inches, and a reduction of area of not less than 50 [?] per cent. Samples of each sheet to be subjected to the marine test prescribed by law, and the result of the tests furnished to the Light-House Engineer. The tests to be made at the cost of the contractor, by a duly appointed U.S. Inspector of boiler plate.

The thickness of sheets, dimensions and spacing of braces and stay bolts to be as shown on plans, and all other details must be in conformity with the general rules and regulations prescribed for the construction of marine boilers. All rivet holes to be drilled and just have the burr removed from their edges.

All rivets, braces and stay bolts to be of the best quality of wrought iron.

All pipe to be of the best quality of wrought iron, and all fittings to be of the best quality of malleable iron. Valves to be genuine Jenkins Brothers, and steam cocks to have finished plugs and hexagon heads.

INSPECTION AND TEST

The work will be subject to the personal supervision of the Light-House Engineer, or his authorized agent, and all necessary facilities must be afforded for inspecting the materials and workmanship.

The boilers must sustain satisfactorily a hot water pressure of 100 pounds per square inch in the presence of a duly authorized agent of the Light-House Engineer.

PAINTING

After the work is completed and inspected at the shop, the boilers will be covered (finished parts excepted) with two coats of brown metallic paint.

COMPLETION AND DELIVERY

The bidder will state in his bid the earliest date upon which he will complete and deliver the work as herein specified.

Delivery is to be made at Milwaukee, Wis., on wharf convenient for Light-House Tender, free of all expense to the Government.

The contractor will box all small articles liable to injury, and will furnish a complete inventory of all articles supplied, with the contents of each box.

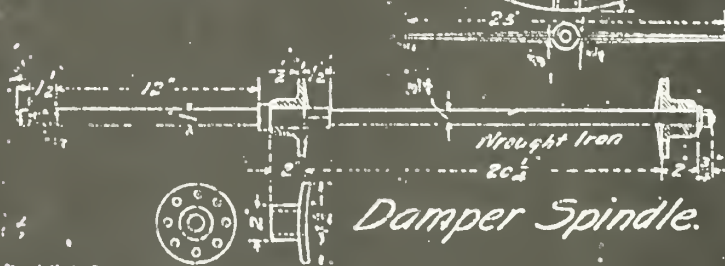
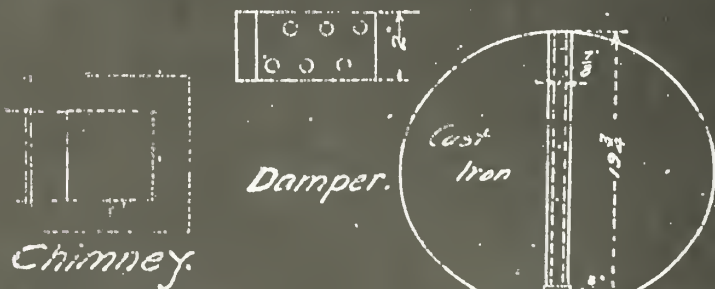
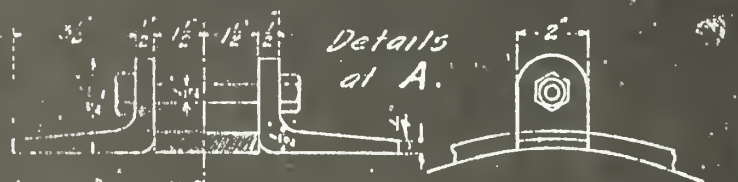
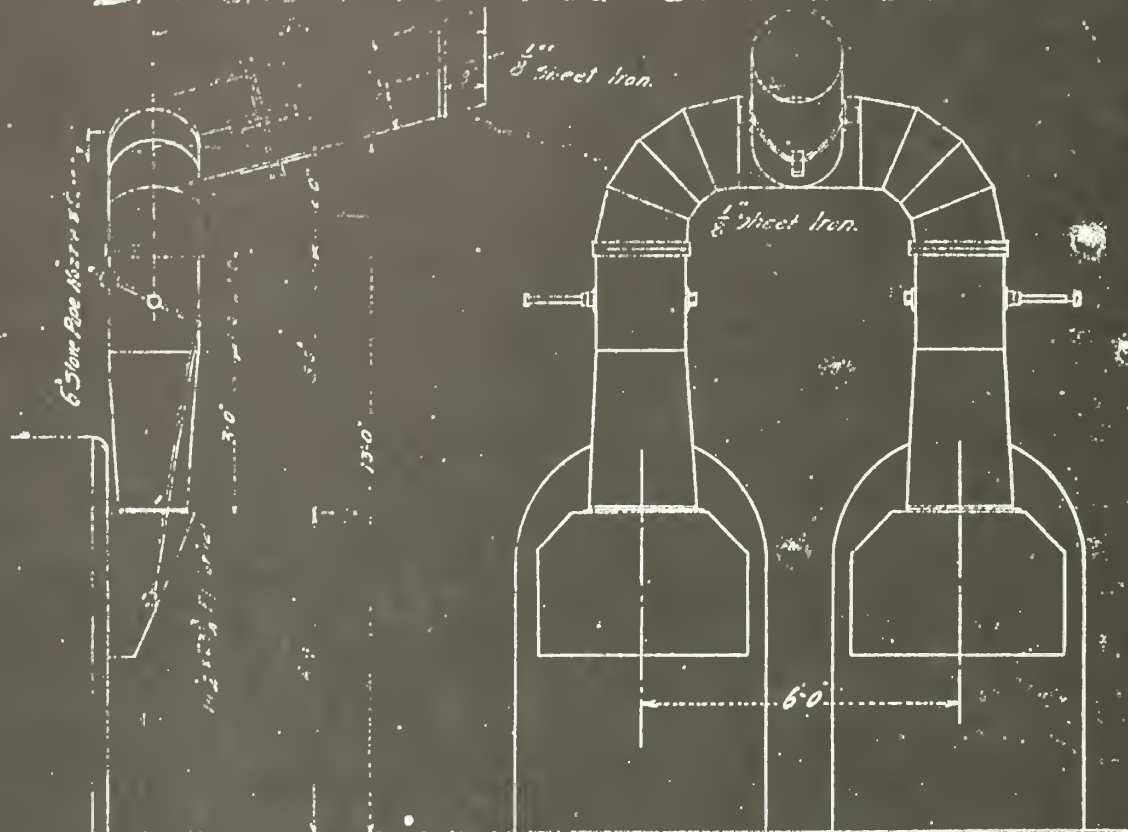
PAYMENT

Payment in full will be made for the work complete, when delivered.

**INVENTORY
OF
BOILERS, PIPING, FITTINGS, SUPPLIES AND TOOLS
REQUIRED TO BE FURNISHED WITH
TWO BOILERS
BOILERS AND ATTACHMENTS**

Two boilers, with furnace doors; two steam drums, with nozzles for boilers, elbows for whistles and flanges for safety valves; two ash pit doors, grate bearers, and grates; four steam drum nozzles; two man-hole plates; eighteen hand-hole plates; flanges for gauge, feed water and blow-off; two britchens with doors; two roof thimbles; two 2 1/2" safety valves complete, including pulleys and cord; two 2 1/2" elbows; four 2 1/2" nipples; two pieces 2 1/2" pipe, each 15 feet long, one end threaded; two combination gauges, each fitted with three steam gauge cocks, with stuffing boxes, one water gauge, one steam gauge, and four extra glasses for the water gauges; two 2" blow off cocks, with fittings and 40 feet of 2 inch pipe.

BUTCHER'S FOR FOG SIGNAL BOILERS.



Office of Light House Engineer

Wm. H. Rouse

5. 1879

Entered by
 William H. Rouse
 1879



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

Publication services were provided by the graphics staff of the Denver Service Center.
NPS D-131 September 1990

